DOCUMENT RESUME

ED 036 058 EF 001 970

TITLE	LONG RANGE DEVELOPMENT PLAN, UNIVERSITY OF CALIFORNIA, BERKELEY, JUNE 1962.
INSTITUTION	CALIFORNIA UNIV., BERKELEY.
PUB DATE	JUN 62
NOTE	67P.
EDRS PRICE	EDRS PRICE MF-$0.50 HC-$3.45
DESCRIPTORS	*CAMPUS PLANNING, CONSTRUCTION PROGRAMS, DEVELOPMENTAL PROGRAMS, *EDUCATIONAL OBJECTIVES, *FACILITY GUIDELINES, *MASTER PLANS, PHYSICAL ENVIRONMENT, SITE DEVELOPMENT, *UNIVERSITIES

ABSTRACT

FOLLOWING A REVIEW OF CAMPUS PLANNING HISTORY AT THE BERKELEY CAMPUS, A STATEMENT OF ACADEMIC OBJECTIVES AND NEEDS, AND A DESCRIPTION OF THE CAMPUS, A LONG RANGE DEVELOPMENT PLAN IS SET FORTH REPRESENTING AN UPDATING OF THE 1956 PLAN. THE OBJECTIVES, PRINCIPLES AND MAJOR PROPOSALS OF THE PLAN ARE PRESENTED. MAPS OF THE PROPOSED CAMPUS DEVELOPMENTS ARE INCLUDED. (FS)

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CAMPUS PLANNING COMMITTEE

AND

OFFICE OF ARCHITECTS AND ENGINEERS

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EF 001 970

LONG RANGE DEVELOPMENT PLAN

UNIVERSITY OF CALIFORNIA BERKELEY

JUNE 1962

Berkeley: Office of the Chancellor
June 8, 1962

PRESIDENT KERR:

On behalf of the Berkeley Campus Planning Committee I take pleasure in forwarding to you the accompanying material, approved on September 28, 1961 by the Committee as a revision of the 1956 document, "Long Range Development Plan for the Berkeley Campus, University of California."

As I know you are particularly aware, through your intimate association with the 1956 Plan, the Committee had anticipated that a new version would be required within a very few years of publication in order to reflect changes in conditions and needs. Representing an evolution rather than an abrupt change, this new document, titled "Long Range Development Plan, University of California, Berkeley," is proposed for approval by The Regents and for subsequent printing as a public document setting forth the current long range physical development policy for the Berkeley campus.

May I call your attention to the main aspects of the new version of the Plan:

It gives special emphasis to its foundation upon academic planning as set forth in the Master Plan for Higher Education in California, the University Growth Plan, and the Berkeley campus Academic Plan.

Concurrent with the climax of two years' intensive study by Mr. Thomas D. Church, Consulting Landscape Architect, it lays stress on proposals for central campus landscape development.

Drawing and descriptive material reflect recent years' planning studies of the Strawberry Canyon and hill areas and of outlying lands, not covered in the predecessor Long Range Development Plan but included in the term, "Berkeley campus."

I recommend that this Plan be presented to The Regents at their June meeting, for adoption in principle.

Cordially,

E. W. STRONG

ACKNOWLEDGMENTS

The Campus Planning Committee bears final responsibility for the contents of this document. However, the Long Range Development Plan represents contributions of many members of the campus family.

The former "Committee on Campus Planning, Berkeley," to which the present Committee has been successor during the past year, gave continuing attention since 1955 to major campus planning and design matters. Under the chairmanship of Regent Donald H. McLaughlin, that Committee became synonymous with wise counsel in long range planning considerations.

The Chancellor's Academic Advisory Committee has offered important guidance in the areas of teaching and research needs on which the physical Plan presented here is founded. The Chancellor's Administrative Advisory Committee, as well, has devoted many hours to problems to which the Long Range Development Plan proposes solution.

Particular recognition must be paid to the Administrative Committee on Buildings and Campus Development. Over the past few years, under the successive chairmanships of Professor Clarence W. Brown and Professor Sanford S. Elberg, this Committee has provided translation of academic and research needs into physical planning terms and has borne a major responsibility for annual preparation of individual project planning guides and the long range project priority lists. Its several subcommittees, particularly the former Subcommittee on Physical Development Planning (Professor Carl L. Nordly, Chairman), have offered valuable review and advice.

The Liaison Subcommittee of the Campus Planning Committee, as chaired by Professor Richard L. Jennings, has been especially constructive in its concern with extra-campus planning matters that involve campus, community, and metropolitan region.

The Campus Planning Committee wishes also to acknowledge the professional design assistance of Members Thomas D. Church, Louis A. DeMonte, and Dean William W. Wurster. Mr. DeMonte and Messrs. Albert R. Wagner and Charles D. Tefft, Associate Planners, representing the Office of Architects and Engineers, have likewise rendered devoted service without which the Long Range Development Plan would have been immeasurably more difficult of achievement.

To the above-mentioned groups and individuals, and to numerous other participants in the complex process of campus planning, the Committee expresses its deep indebtedness.

FOREWORD

This document has been prepared by the Office of Architects and Engineers under the auspices of the Campus Planning Committee, whose primary charge is continual attention to matters related to long term physical planning for the Berkeley campus of the University of California. The text of this document and the three principal drawings inside the rear cover constitute the Long Range Development Plan and replace a similar document prepared and officially adopted by The Regents in 1956. As an outgrowth of the 1956 Plan, this document represents a summation of gradual changes since that time, rather than a "new plan" as such. Indeed, its most important single section, "Physical Planning Objective and Principles," remains relatively unchanged from corresponding statements of six years ago.

Several important differences between this document and its predecessor should be mentioned.

All principal lands constituting the "Berkeley campus" are now included. In addition to central-Berkeley campus areas, the Gill Tract (Albany), the Richmond Field Station, the Richmond Services Center (formerly the Ford plant), the Blake Estate (Kensington), and the portions of Strawberry Canyon and Berkeley Hills properties to the east of Berkeley, including the recently-acquired Chaparral Hill Tract, are also the subjects of planning policy statements in written and graphic form.

The physical Plan relates closely to comprehensive statements on academic planning policy which did not exist until recent years—namely, the "Master Plan for Higher Education in California," the "University Growth Plan," and the Berkeley campus Academic Plan.

The Long Range Development Plan now incorporates in broad terms detailed proposals for central campus landscape, as prepared by Consulting Landscape Architect Thomas D. Church.

A comprehensive physical plan firm enough to provide for anticipated growth and yet sufficiently flexible to allow for adjustment to changing circumstances is requisite to orderly and economical growth of the Berkeley campus. For full use of the Plan, a responsible advisory agency utilizing professional staff services in architecture and planning is necessary. Such an arrangement exists in the form of the Campus Planning Committee working with the Office of Architects and Engineers.

This document, like the one it replaces, can be anticipated to serve, with occasional minor amendments, for the next four to five years. Toward the end of that period, however, it also will require revisions.

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I PLAN HISTORY

II ACADEMIC PROSPECTUS

III THE CAMPUS TODAY

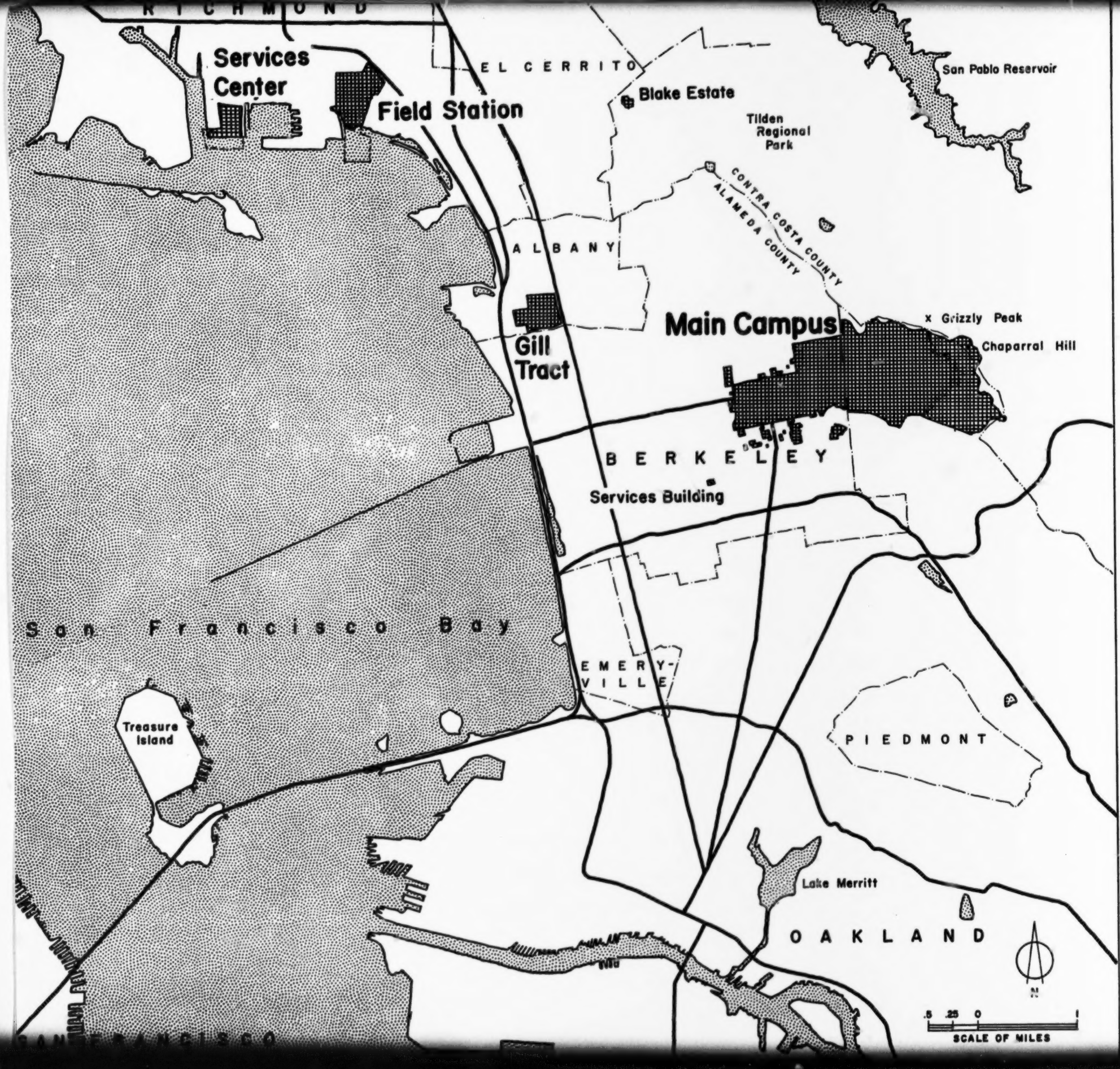
IV LONG RANGE DEVELOPMENT PLAN

Long Range Development Plan Drawings Cover

Rear 1—Main Campus Areas

2—Upper Hill Areas

3—Outlying Areas



Berkeley Campus Properties in the East Bay, 1962

Part I: Plan History

THE HISTORY of planning for the Berkeley campus is actually older than the University of California itself. In 1865—three years before this institution was chartered—the site on Strawberry Creek that had been chosen for the College of California had the attention of Frederick Law Olmsted, landscape architect and world-famous designer of New York's Central Park. Olmsted's plan determined the direction of the present campus axis aligned with the Golden Gate, and the location of Piedmont Avenue and other campus entrances.

The first official plan for the campus of the University was that of 1870 by architect David Farquharson, whose plan for "six monumental and spacious buildings" reflected the orientation laid out by Olmsted and the sites of former North Hall, existing South Hall, and the "grand, Central Building" which became the first University library, Bacon Hall. The Farquharson Plan guided campus growth over the next quarter century.

A few years before the turn of the century architect Bernard Maybeck, then an instructor in drawing, interested Regent Jacob Reinstein and Mrs. Phoebe Apperson Hearst in the idea of developing a comprehensive plan for University buildings and grounds. Thus arose the now-famous International Competition, underwritten by Mrs. Hearst and won in 1899 by Paris architect Emile Benard. He prepared a monumental plan reflecting the grand, formal scale and architectural classicism of the Beaux Arts School. In 1900, after Benard had visited the campus and revised his plan to meet site needs, The Regents adopted his plan officially.

John Galen Howard (who together with S. M. Cauldwell had placed fourth in the competition) was appointed in 1902 as Supervising Architect. Engaged primarily to interpret and carry out Benard's plan, Howard modified it over the years until by 1908 he had evolved virtually a new plan. He wrote in explanation:

> Future generations will consider themselves bound by our preparations . . . only to the extent that we have forseen their needs and have planned wisely for them. We cannot force them to follow out our schemes if these run contrary to their own inclinations; but we may fairly expect that if we plan wisely and in accordance with the really natural and right thing, our successors will follow out what we arrange, if only because it will accord with reason.

In 1913 The Regents approved Howard's Plan, entitled "The Phoebe Apperson Hearst Plan, University of California," as the basis for future development. Accepting the earlier features determined by Olmsted and Farquharson the Plan featured a broad, formal east-west axis oriented with the Golden Gate, with buildings along this axis following the natural topography. This Plan has furnished the core of the present campus: Wheeler Hall, Durant Hall, the Library, California and Le Conte Halls, Sather Tower, and the Esplanade. Howard served as Supervising Architect until 1927.

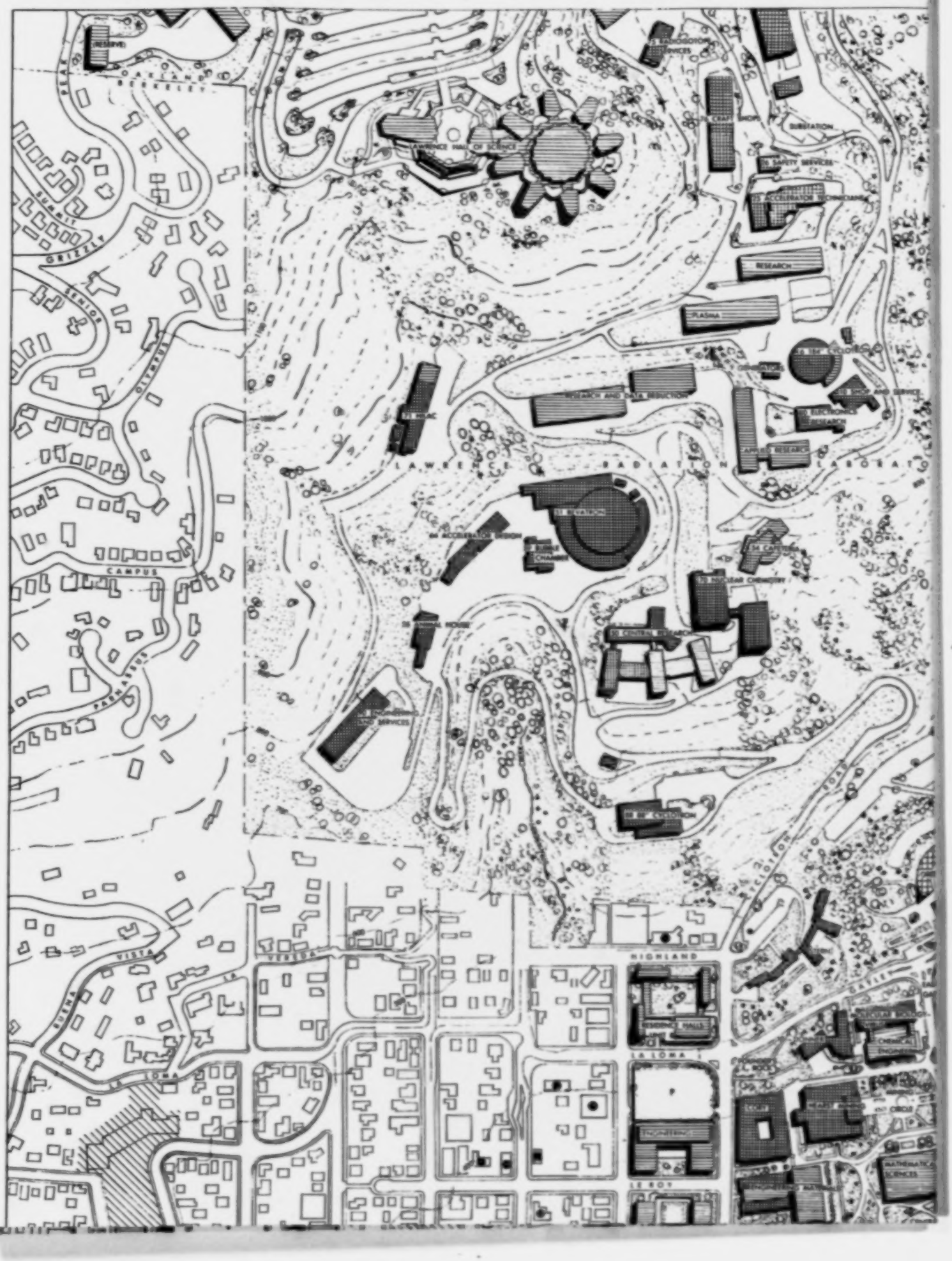
For the next nine years George W. Kelham served as Supervising Architect and followed in general the scheme drawn by Howard. In 1938 Arthur Brown, Jr., became Supervising Architect, and his studies led to a new plan that received Regents' approval in 1944. This design elaborated upon Howard's arrangement, retaining its main east-west axis but adding several lesser axes and building groupings, incorporating a chain of open spaces following the branches of Strawberry Creek, and revising internal campus circulation.

From 1948 to 1955 the position of Supervising Architect was vacant. The post-World War II building program was administered by the Office of Architects and Engineers acting in consort with a faculty Committee on Buildings and Campus Development. In 1952 The Regents approved in principle a revised campus plan, entitled "Planning the Physical Development of the Berkeley Campus," for the preparation of which these groups were responsible. Its new features, called for as a result of unprecedented enrollment growth and building space needs, included a restudy of building groupings and densities, definition of permanent open spaces, adjustment of proposals for circulation and parking, and establishment of a well reasoned program for acquisition of adjacent lands for campus expansion.

The Regents in 1955 appointed a Committee on Campus Planning, with the Office of Architects and Engineers as staff, to perform the duties of Berkeley campus Supervising Architect. Including Regent Donald H. McLaughlin (Chairman), then-Chancellor Clark Kerr, and Dean William W. Wurster of Architecture as its members, this Committee was responsible for securing Regents' adoption of a new "Long Range Development Plan" in 1956. The Long Range Development Plan, built upon the main features of the 1952 study, was published in printed form and has been widely circulated publicly as an expression of campus development policy; it has had continuous technical attention and periodic review by the Committee and The Regents to the present time.

Campus planning today is vested primarily in a seven-member Campus Planning Committee under the chairmanship of the Chief Campus Officer (Chancellor). This Committee bears responsibility for preparation and maintenance of a Long Range Development Plan that reflects the complex physical needs of the Berkeley campus. Assisted by the Chancellor's Administrative Committee on Buildings and Campus Development, which attends to interpreting the campus Academic Plan and formulating annually a priority listing of proposed projects, or capital program, the Campus Planning Committee advises the Chancellor, the President of the University, and the Board of Regents on all matters of campus physical development. The Committee, beyond its central function of long range planning, recommends appointments of executive architects and landscape architects for specific projects, reviews or approves project plans, and reviews the long range capital program. The Committee is assisted also by a Liaison Subcommittee which meets regularly with a corresponding body of the City of Berkeley, and occasionally with other agencies, to consider community and regional planning problems affecting the Berkeley campus. A similar committee will meet with representatives of the City of Richmond. The Consulting Architect, the Consulting Landscape Architect, the Campus Architect, and his Associate Planner provide professional and technical service to these advisory groups. A system of internal communications on the campus insures widespread use of the Long Range Development Plan as a continuing, broad guide to campus growth matters.

UNIVERSITY OF CAL



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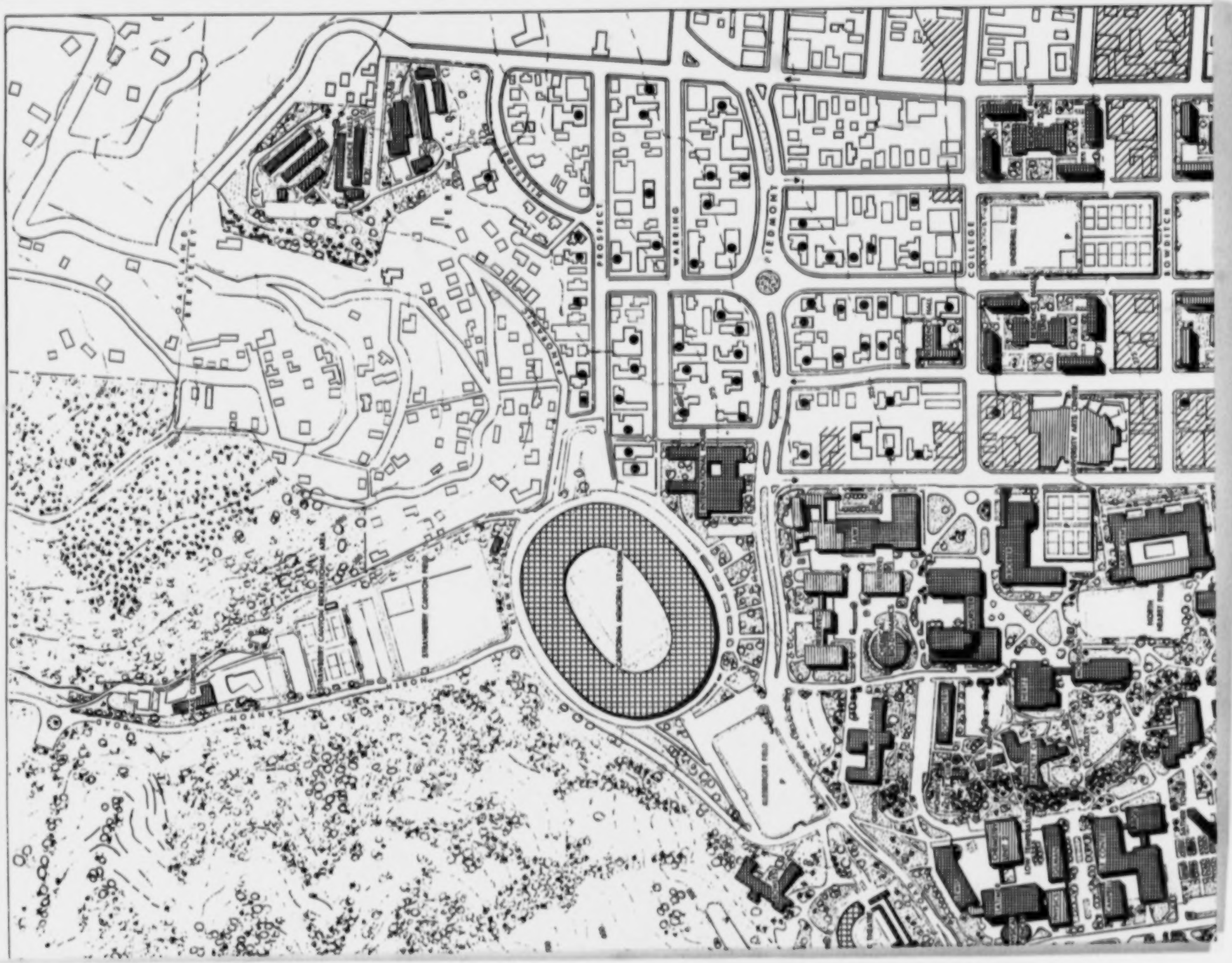


LONG RANGE DE

main campus areas

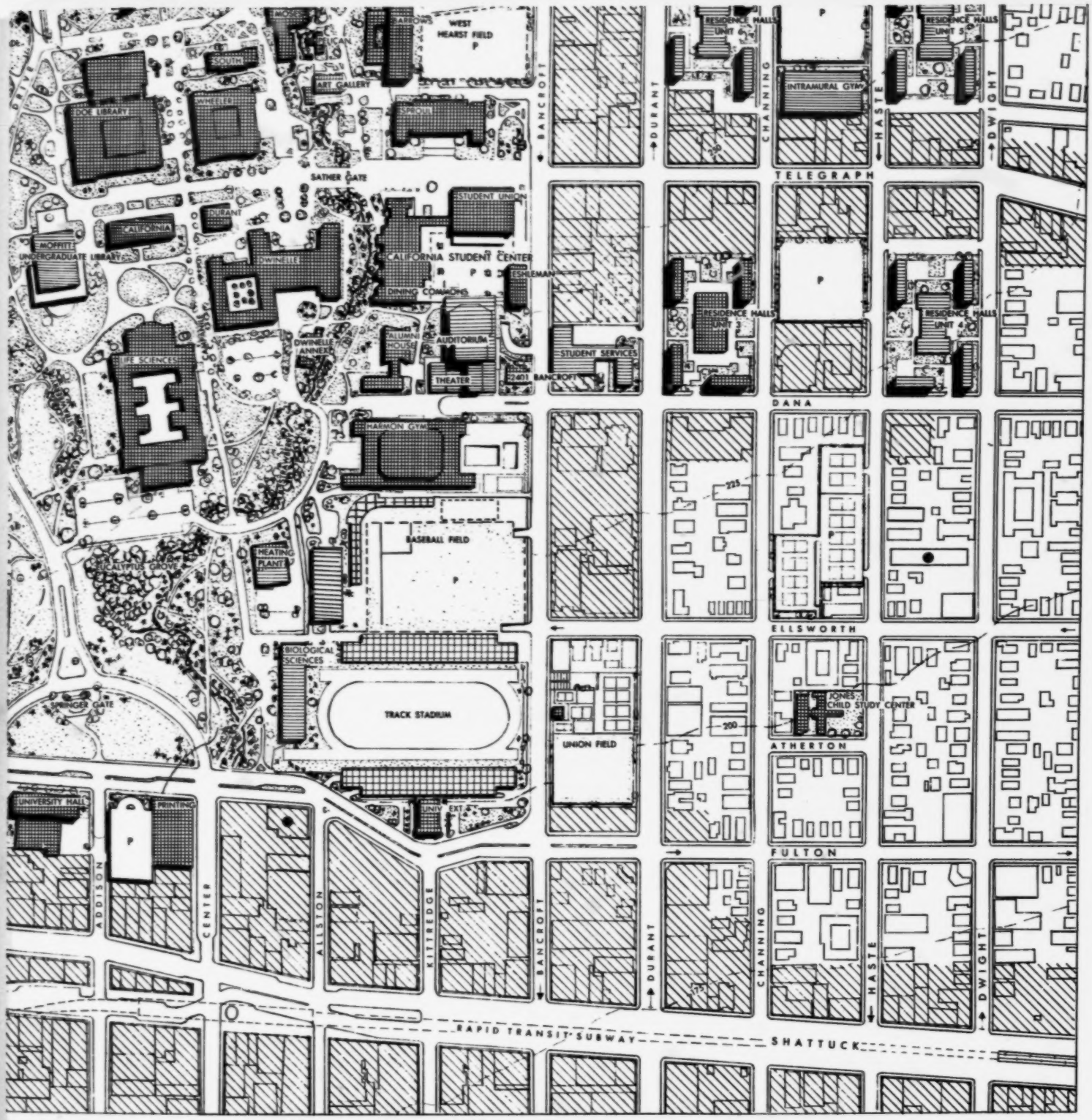
LANDSCAPE

tree masses

grass, glades

fields, courts

BUILDINGS

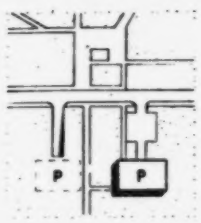


VELOPMENT PLAN

amended to September 1965 **JUNE 1962**

campus – major
spectator seating
community uses
other non-campus

CIRCULATION



pedestrian ways
roads, parking
parking structures

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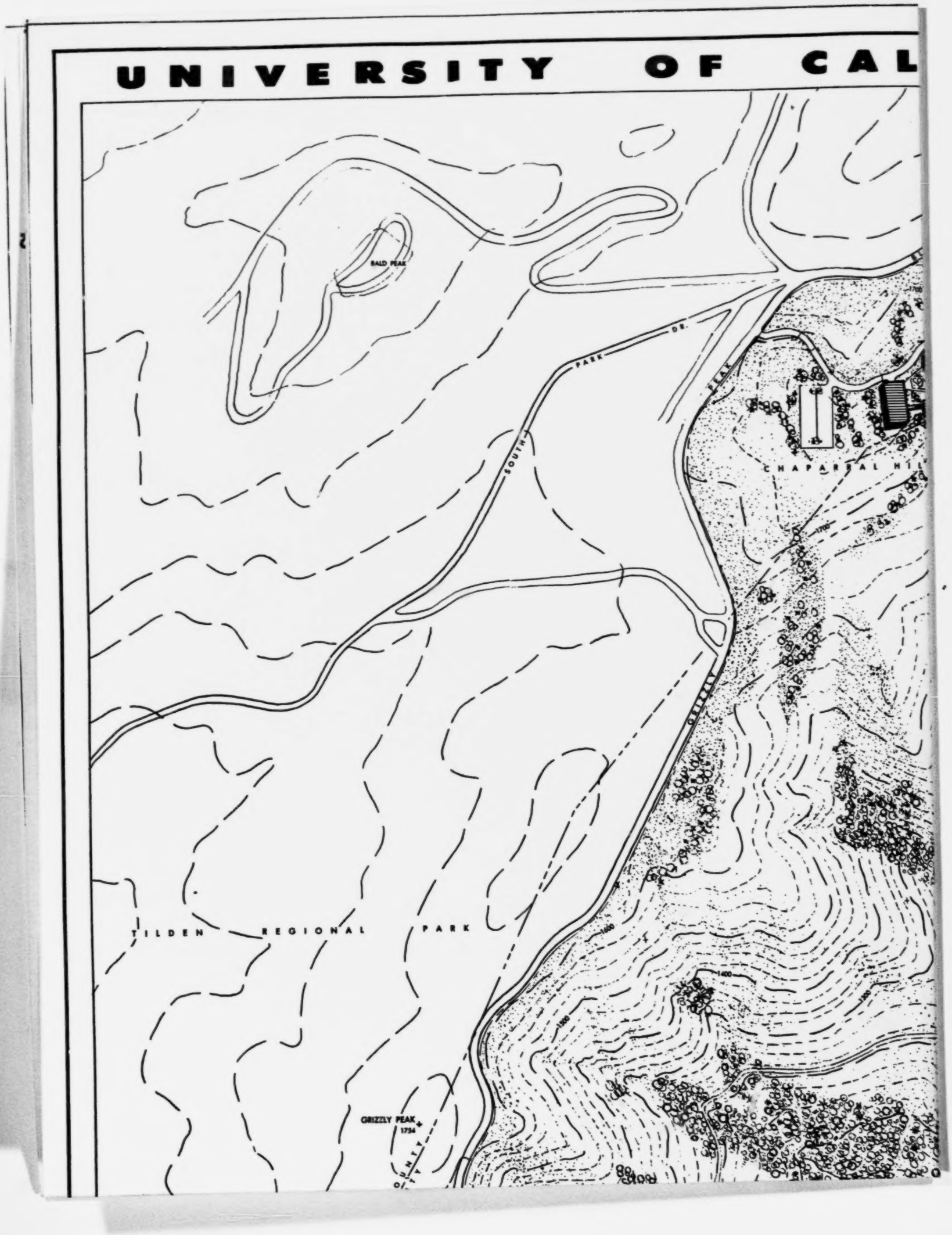
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SOUTH PARK DR
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TILDEN REGIONAL PARK
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1754
1700
1600
1500
1400
1300

IFORNIA, BERKELEY

LONG RANGE DE

upper hill areas

2

LANDSCAPE

tree masses

grass, glades

fields, courts

BUILDINGS

VELOPMENT PLAN

JUNE 1962

amended to September 1965

2

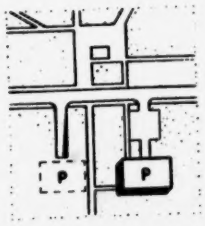
campus – major

spectator seating

community uses

other non-campus

CIRCULATION



pedestrian ways

roads, parking

parking structures

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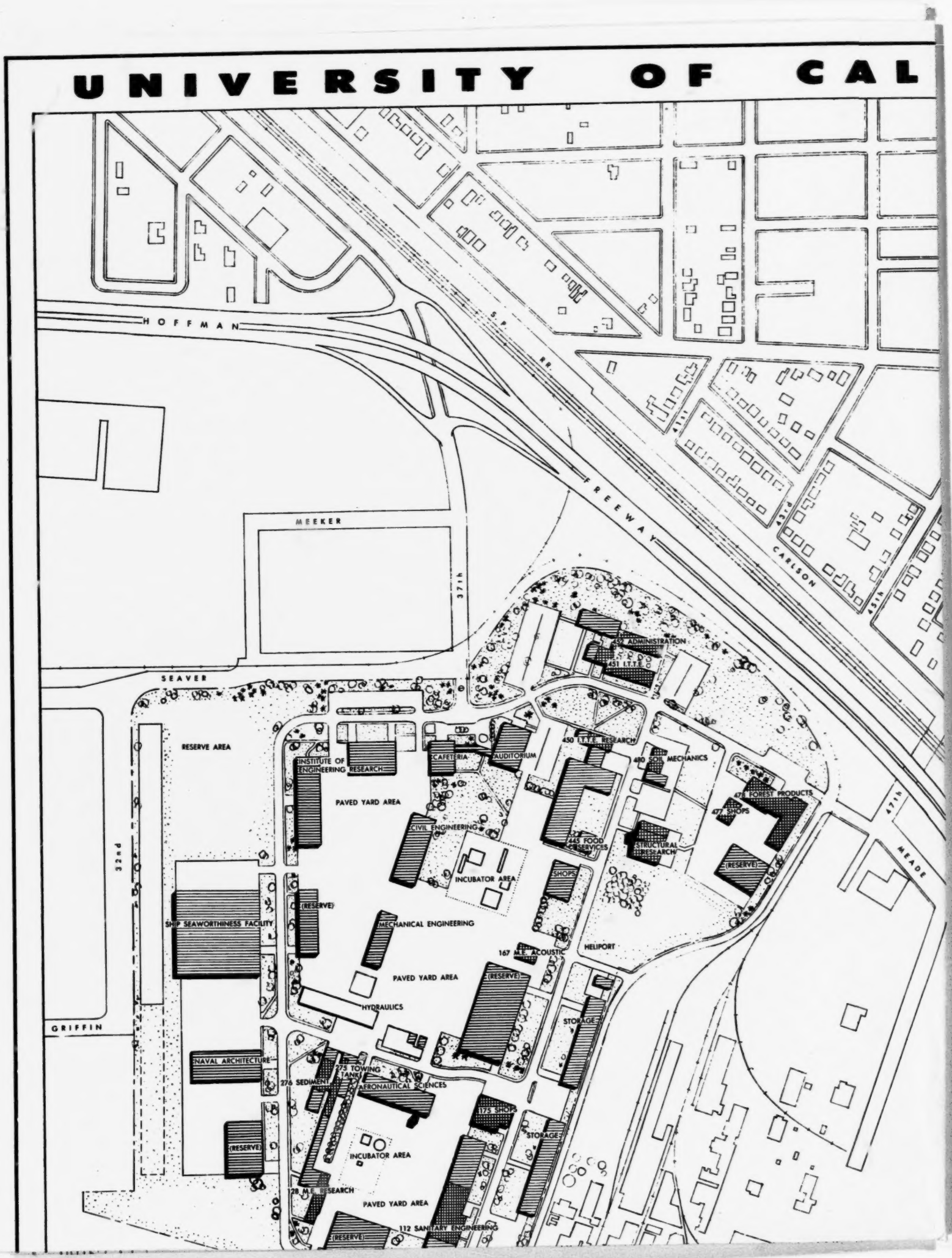
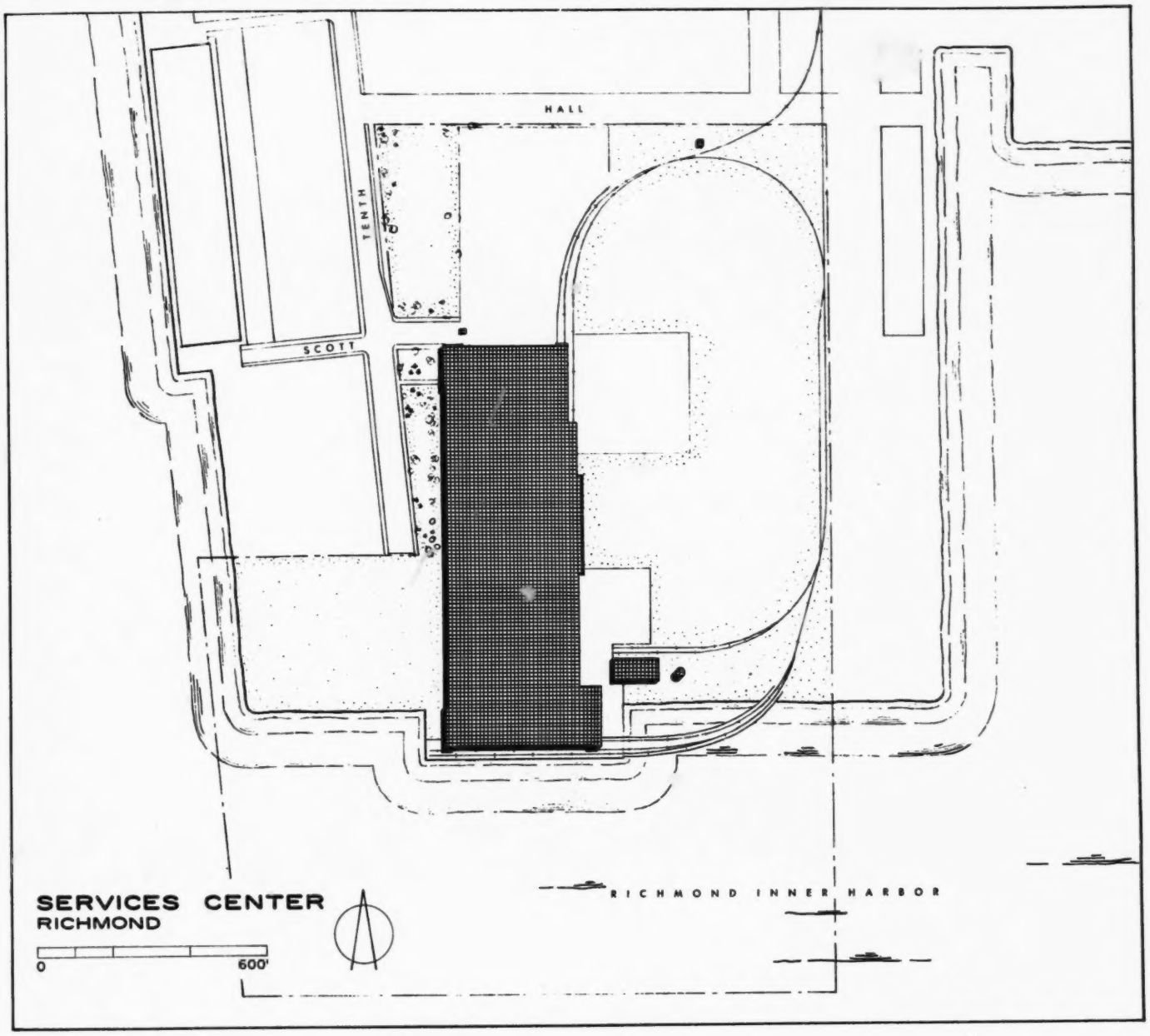
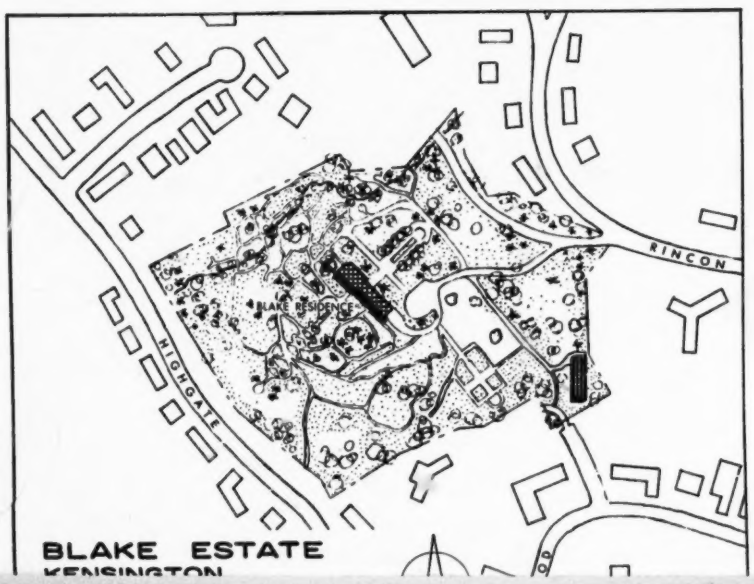
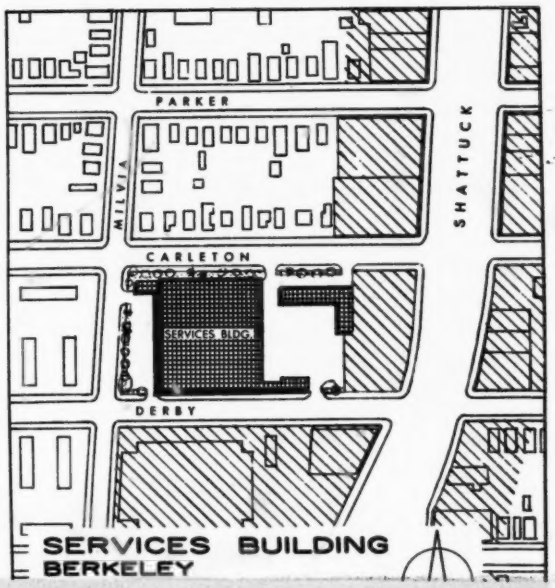
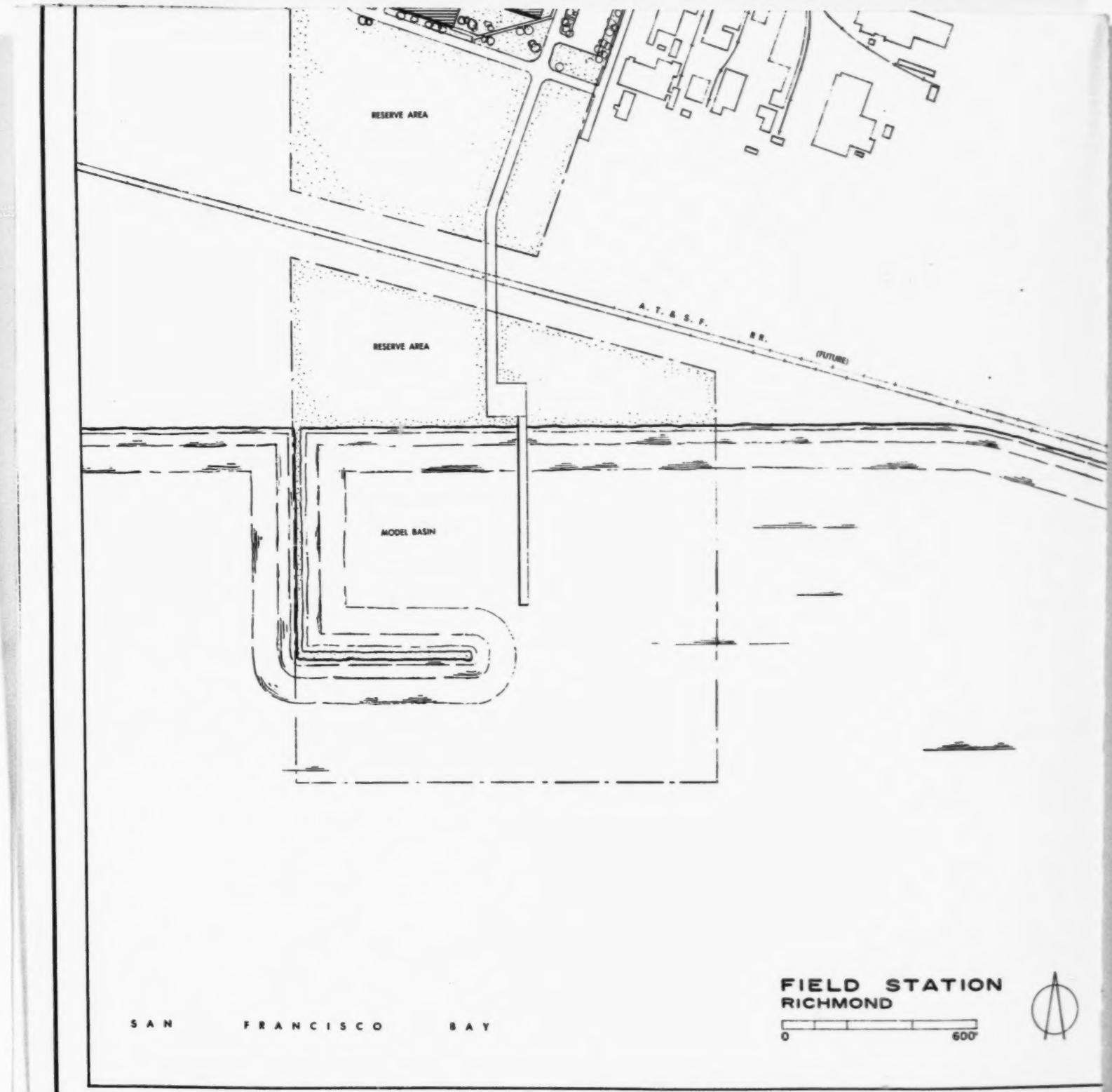

UNIVERSITY OF CAL
HOFFMAN
S.P. RR.
FREEWAY
MEEKER
37th
CARLSON
45th
SEAVER
RESERVE AREA
INSTITUTE OF ENGINEERING RESEARCH
CAFETERIA
AUDITORIUM
ADMINISTRATION
451 I.T.T.E.
450 I.T.T.E. RESEARCH
480 SOIL MECHANICS
470 FOREST PRODUCTS
475 SHOPS
PAVED YARD AREA
CIVIL ENGINEERING
445 FOOD SERVICES
STRUCTURAL RESEARCH
(RESERVE)
INCUBATOR AREA
SHOPS
32nd
SHIP SEAWORTHINESS FACILITY
MECHANICAL ENGINEERING
167 M.E. ACOUSTIC
HELIPORT
PAVED YARD AREA
HYDRAULICS
STORAGE
GRIFFIN
NAVAL ARCHITECTURE
275 TOWING TANK
276 SEDIMENT
AERONAUTICAL SCIENCES
175 SHOPS
STORAGE
INCUBATOR AREA
28 M.E. RESEARCH
PAVED YARD AREA
112 SANITARY ENGINEERING
47th
MEADE

IFORNIA, BERKELEY









LONG RANGE DEV

outlying areas

3

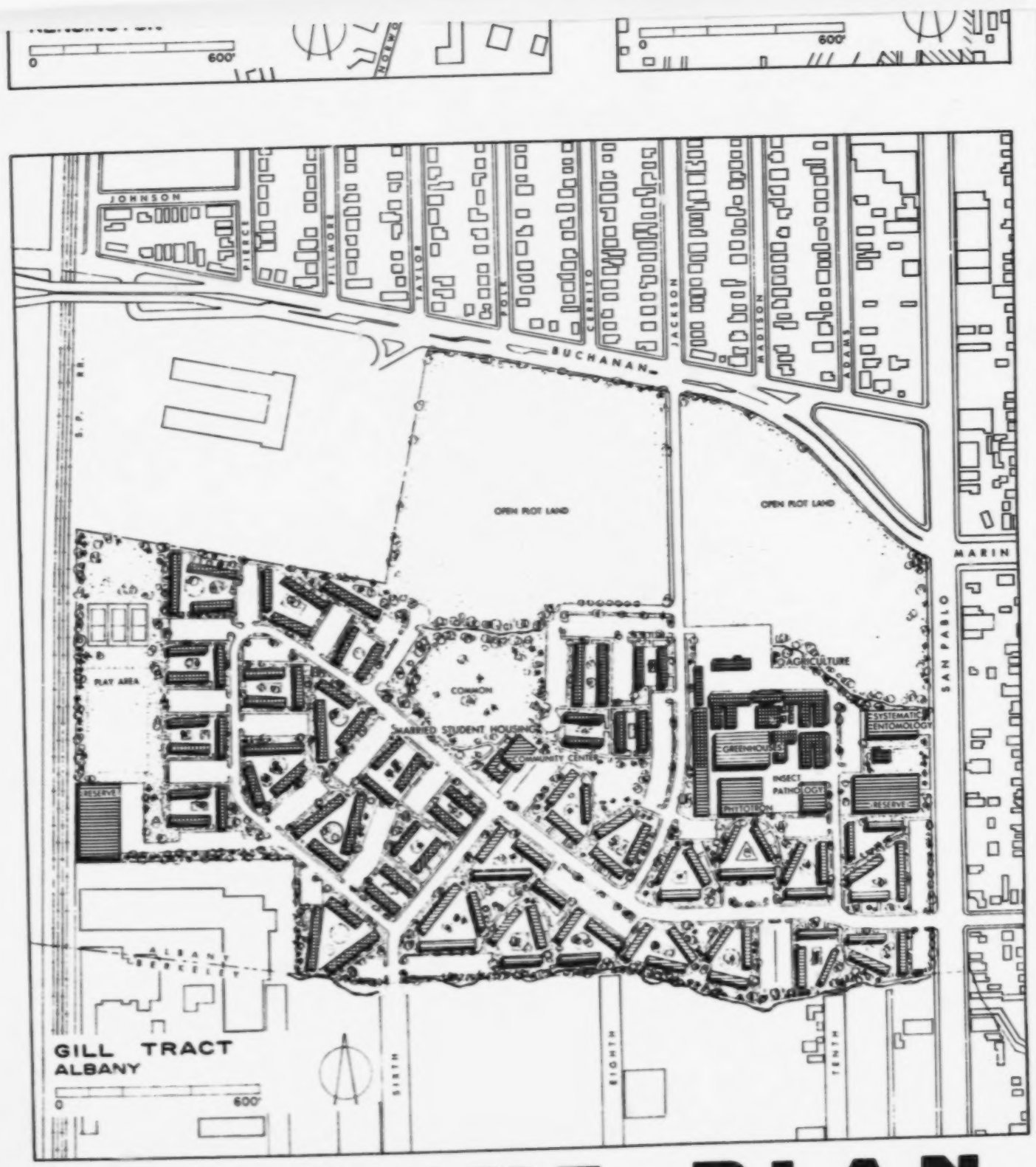
LANDSCAPE

tree masses

grass, glades

fields, courts

BUILDINGS



VELOPMENT PLAN

JUNE 1962

amended to September 1965

3

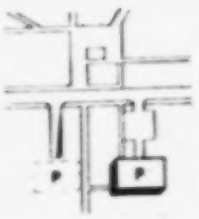
campus - major

spectator seating

community uses

other non-campus

CIRCULATION



pedestrian ways

roads, parking

parking structures

12376

Part II: Academic Prospectus

"Master Plan for Higher Education in California"

During the past five years information concerning the physical needs of the Berkeley campus has been gathered by two major studies. The first was by means of the traditional annual review of growth of academic and administrative units, carried out by the Chancellor's administrative and academic advisory committees. The second was by the survey team of California educators, headed by Arthur G. Coons, President of Occidental College; this group drafted the major provisions of the *Master Plan for Higher Education in California*. This important document, embodied in State Senate Bill No. 33 and signed by Governor Brown on April 26, 1960, defines the roles and functions of the several segments and divisions of institutions offering higher education in the State: the various private colleges and universities, the public junior colleges, the State College system, and the University of California.

The first effect of the *Master Plan* on academic planning for the Berkeley campus was to provide a maximum target figure for student population and, more important, the distribution of this population into lower, upper, and graduate divisions. A prior *Restudy of the Needs of California in Higher Education* (1955) had established working "norms" for the amounts of space of different kinds required by the various categories of student and faculty populations. The combination of the *Master Plan* maximum population figures with the *Restudy* space standards at long last provided firm bases by which the physical needs of the Berkeley campus could be determined, in line with both University-wide maximum figures and the sum of individual recommendations of the many Berkeley campus units. With an established maximum enrollment figure of 27,500 students as set forth in the *Master Plan* for the Berkeley campus (as also for the Los Angeles campus and for three new general campuses to be established), it has become possible to predict more accurately the size of the physical plant required by this population.

One of the consequences of the *Master Plan* has been to re-emphasize the role of academic research as a part of the pattern of activities of the University of California—an activity inseparable from teaching functions. Thus, not only graduate student and faculty research must be accounted for, but also the existence of a significantly large and new element in University population—the post-doctoral fellow and the nonacademic group of supporting investigators—has become recognized. A census of post-doctoral fellows resulted from this recognition, and it remains to implement this study by establishing standards of space needs for these groups.

The second effect of the *Master Plan* was to acknowledge space needs of "organized research"—i.e., institutes, bureaus, centers, laboratories, etc. (by usual nomenclature). It will be a task of the next few years to define the standards by which requests from these units may be evaluated in terms of necessary physical plant. A considerable realignment of academic personnel in part-time assignment to organized research units has taken place. Such deployment will continue.

During the period of germination of the *Master Plan*, academic reviews of the teaching needs of all Berkeley campus departments were exhaustively pursued. Kind and

quantity of rooms, optimum utilization rates, and other physical plant qualities were studied for each academic unit. Size of classes and nature of teaching entered in great detail into the goals that have been set for the physical plant of the Berkeley campus.

"University of California Growth Plan"

"A Recommended Plan for Growth of the University of California," prepared by President Clark Kerr, was accepted by The Regents on June 17, 1960, as a general guide to the academic development of the University. The *University Growth Plan* served to amplify those parts of the *Master Plan* that bear particularly upon the University of California. The *University Growth Plan* projects enrollments for all campuses to 2000 A.D., outlines ways to make maximum use of present campuses, suggests scheduling for the establishment and nurturing of new campuses, and defines the "acute period" during which needs will outstrip facilities between 1965 and 1975. Through its enrollment forecasts, made by techniques that in the past few years have proved very accurate, it can be expected that the Berkeley campus should reach its maximum total student enrollment (27,500) by 1964 or 1965. Lack of student housing may, however, be an impediment.

Berkeley Campus Academic Plan

1. GENERAL STATEMENT

Academic planning on the Berkeley campus is guided by the following purposes:

(1) To maintain and augment full competence in all basic fields of human knowledge now represented in the instructional and research programs of the campus.

(2) To establish leadership in selected new major areas of instruction and research, for example, in molecular biology, chemical bio-dynamics, space sciences, radio astronomy, nuclear engineering, operations research, and urban and regional planning.

(3) To continue in development of the campus as an international center of learning, especially at the graduate and postdoctoral levels and by participation of members of the faculty in overseas projects.

(4) To foster interdisciplinary research—one of the most fruitful methods of exploiting new frontiers—and to increase research opportunities for graduate students in organized research units.

(5) To expand research facilities and funds to meet research needs of the faculty and of graduate students as they increase in number, seeking at the same time to have this done in a coordinated way through an officer responsible to the Chancellor in working with research directors, deans, departmental chairmen, research committees, and granting agencies.

(6) To exploit and to enhance the cultural advantages of the Berkeley campus in its setting in the San Francisco-metropolitan area, in its International House and Hearst Greek Theater, in its resources in literature, music, drama, and the arts.

(7) To seek diligently for students of exceptional academic talent and to provide educational opportunity best suited to make the most of their superior ability.

Several characteristics are favorable to the fulfillment of these purposes:

(1) Both in selection of graduate students and in the conduct of graduate students, Berkeley compares favorably with the best universities in the nation in its quality. As the graduate enrollment increases to 12,000 students by 1970, the Berkeley campus will be one of the greatest centers of graduate training in the world.

(2) Berkeley ranks high in the number of departments rated as distinguished. This deserved reputation attracts students from all parts of this country and from many nations throughout the world. These students enrich the intellectual life of the University of California and the State of California. Further, the recruitment of able faculty by the University of California in competition with other leading universities is aided by excellence already attained. In its great research library maintained in strength, in its Lawrence Radiation Laboratory, Virus Laboratory, Donner Laboratory, and other specialized research units, and in its museum collections, Berkeley is equipped to retain and advance in the prestige it has won. Thereby it contributes at the same time to the reputation of the entire University and to the development of all campuses, particularly the smaller and the new campuses in their further expansion.

(3) The residence of students and faculty members adjacent to the campus has enabled Berkeley to maintain a desirable University community while, at the same time, obtaining the advantages of location in a great metropolitan area.

(4) The attractiveness of the campus in its buildings and landscaping has complemented the high reputation achieved academically. The revised Long Range Development Plan is dedicated to a continued harmonious relating of academic and physical development now well advanced on the campus.

2. STAFF NEEDS TO 1970

Enrollment and Mixtures of Categories of Students. The enrollment, budget, staff, and space figures projected from levels of Fall 1960 assume that the ceiling of enrollment at 27,500 students is reached in 1964 with a mixture of 8,050 lower division, 10,150 upper division, and 9,300 graduate students. By 1970 the mixture will change to 6,000, 9,500, and 12,000.

This conspicuous increase in emphasis on graduate work is wholly in keeping with the foregoing statement of general objectives of the Berkeley campus. While the campus will continually strive for improvement in the quality of the undergraduate program, the total undergraduate program, apart from its own importance, serves an essential role in connection with the training of the graduate group for the teaching profession in the levels of higher education.

Student-Staff Ratio. Improvement will be sought through the lowering of the ratio. The ratio must move in this direction in order to cope with the relatively great increase in graduate students. For this category, effective instruction, with its large involvement with seminars and individually supervised research, clearly must entail smaller numbers of students per regular faculty member. For 1964 the student-staff ratio is to be 13.7:1 and for 1970, 12:1. The corresponding student-faculty ratio for 1970, which excludes teaching assistants, is 16:1.

3. ACADEMIC PROGRAMMING

Four primary sources of information on academic programming and resultant determination of physical plant needs were used in the designing of the over-all physical plans for the campus:

Departmental Expansions. Each academic department on campus was asked to state its expected needs for courses, staff, and space of various kinds (classrooms, seminar rooms, laboratories, offices, etc., for the campus of 27,500 students).

Annual Space Requests. To a considerable extent academic plans are revealed in annual space requests of the various campus units. These requests and the subsequent recommendations of the reviewing agency, the Committee on Buildings and Campus Development, were used as a source of information.

Staff Studies of Historical Data. The Chancellor's Office has compiled for all campus units a statistical resume that includes such data as changes in course enrollments, staff by rank, budget allocations by category, student-faculty ratios, etc., over a period of years. These data indicate historical trends for each unit and for related subject fields both independently and relative to other segments of the campus.

Staff Studies of Research Needs. Although members of the faculty, with their graduate students, were represented in calculations of space needs on a standardized basis, there were many non-faculty persons allied with the faculty, and carrying various degrees of responsibility for research, whose needs were not reflected in the construction justifications. A census of all personnel in organized research activities, followed by the registration of post-doctoral research personnel present on University or extramural funds, uncovered glaring deficiencies in the physical plant. This information has been utilized in preparing plans for housing the activities.

All this information was restudied by the Committee on Buildings and Campus Development and by the Chancellor's Academic Advisory Committee (which includes key Academic Senate chairmen in its membership). In particular, the following three factors were examined for each department:

(1) estimate of future student load.
(2) capacity of present staff to absorb this load, and
(3) capacity of present space to accommodate additional staff and student needs.

4. SPACE NEEDS

The projections and tabulations shown in Table 1 (page 10) reflect proposals both for staff growth and for space. When the academic plan was restudied in 1960, special attention was paid to those departments in which the growth was exceeding that of the campus as a whole. This increase was to be balanced by slower-growing departments. Examples of areas of more than average growth rate are: Mathematics, Physics, Chemistry, and Engineering.

Building Program. The building program for 1970 reflects the following events in the academic plan:

(1) For expansion of programs in the Arts, the construction of a total of 290,000 net square feet.
(2) For current needs and expansion in the Social Sciences, 417,000 net square feet of new and remodeled space is planned.
(3) For the Humanities, existing spaces will be adequate when the present assignments to other groups are released.
(4) The Library is scheduled to receive 120,000 net square feet of additional space.
(5) For the Engineering Sciences, 677,000 net square feet of new space is planned for both the central campus and the Richmond Field Station.
(6) For Mathematics, Chemistry, Physics, and Astronomy, a total of 403,000 net square feet of new space is planned.
(7) For the Life Sciences, 237,000 net square feet of new space is planned.
(8) For Agriculture, 121,000 net square feet of new and remodeled space is projected for the Gill and Oxford Tracts.

TABLE 1

ESTIMATE OF SPACE REQUIREMENTS AT BERKELEY

Assignable Square Feet of Building Space for 27,500 Total Students in 1965 and 1970 Reflecting Adjustment in mix.

Type of Space	*1960*[1] *Head Count*	*1965* *Head Count*	*1965* *Sq. Ft.*	*1970* *Head Count*	*1970* *Sq. Ft.*
Restudy Standards[2]					
Classroom: Lower Div.	7,297	7,400	80,388	6,000	67,452
incl. Upper Div.	7,696	9,600	67,732	9,500	66,906
seminar) Graduate	6,867	10,500	67,799	12,000	77,748
Total Classroom	21,860	27,500	(215,919)	27,500	(212,106)
Teaching Laboratory: Lower Div.			143,463		120,377
(incl. service) Upper Div.			289,132		285,768
Total Teaching Laboratory			(432,595)		(406,145)
Graduate Research			1,044,929		1,186,284
Staff Research			324,305		350,319
Academic Office			304,571		325,103
Administrative Office			99,491		108,416
Sub-Total, All above			(2,421,810)		(2,588,373)
Shop, Storage, Misc.			252,837		271,520
TOTAL RESTUDY STANDARDS			2,674,647		2,859,893
Additional Allowances[3]					
Other Staff Offices[4]			60,640		64,761
Other Staff Research[4]			31,912		35,557
Organized Research			393,173		579,700
Other			10,300		10,300
Total Additional Allowances			496,025		690,318
TOTALS			3,170,672		3,550,211

[1] 1960 instructional and office space was 1,541,889 sq. ft.; space for organized research was 293,100 sq. ft.; total, 1,834,989 net sq. ft.

[2] Restudy Standards space allocations are quoted in Full Time Equivalent students; conversion from Full Time Equivalent to Head Count has been made for students shown.

[3] To be financed almost entirely from Non-State Funds.

[4] For Visiting Faculty, Emeriti, and Miller Professors.

Professional Schools such as Law, Optometry, Public Health, and Social Welfare are included in the foregoing. In addition, such special laboratories as Marine Biology and Chemical Biodynamics are provided with increments of new space.

Organized Research. Space for organized research as well as for non-organized research, is being planned in revisions of the previous five- and ten-year plans.

The 1964 and 1970 target figures for Organized Research in Table 1 need special mention, as they represent a rough approximation. It was assumed that most, if not all, post-doctoral fellows are to be allocated to organized research units as concerns space and budget. It was further assumed that the post-doctoral population will increase at the same rate as the graduate students. The ratio of 1960 post-doctoral fellows to then-current organized research space was projected to 1964 and 1970, giving a figure for the organized research spaces needed in these years.

5. POLICIES FOR PHYSICAL PLANNING

A number of other policy decisions and predictable trends in academic development have also helped shape and refine the physical plan.

Optimum use of central campus space for academic purposes. Almost all classrooms must be located within a 10-minute class exchange distance with central library facili-

ties as a focal point. This requirement means that central campus space must be reserved for classrooms and teaching laboratories, for departmental and faculty offices, and for library facilities. New structures on the central campus should be built to the maximum size that a particular site will accommodate, consistent with practicable height limitations occasioned by aesthetics and by problems of heavy vertical movement within buildings. Wherever feasible, research units and storage needs must be housed on the periphery of the central campus or, increasingly, moved to outlying campus properties such as the Gill Tract, the Richmond Field Station, or the Richmond Services Center. Furthermore, better utilization of classrooms will be necessary to accommodate the expanding enrollment. Classrooms will have to be used more on a central pool basis, and more heavily on Tuesdays and Thursdays and in afternoons. To match enrollment growth with attainable rates of construction, fuller utilization of the summer period must be obtained in caring for matriculated students.

Shifts in types of facilities for changing divisional distributions. As the proportion of students in the upper and graduate divisions grows, there will be less relative need for large lecture halls and growing need for smaller classrooms, seminar rooms, laboratories, and research facilities. Even for lower division classes, the present trend is toward provision of more seminar-type rooms that promote class discussion and rapport between student and instructor. Experiments with television will have to be carried out to learn how this medium can be properly incorporated into teaching techniques in an effort to keep the physical plant in balance.

Grouping of related subject fields by building complex. Whenever possible, related teaching departments and research units will be housed in clusters of buildings. Such physical proximity will be a convenience to students and staff; more importantly, it will permit joint use of branch libraries, major laboratory equipment, and other such facilities which might otherwise have to be duplicated at several dispersed campus locations.

A further advantage of such grouping is that clusters of buildings surrounded by open spaces provide greater aesthetic variety than isolated buildings spaced evenly throughout the campus landscape.

Arrangement of library facilities. More library facilities, both stacks and reading rooms, must be provided in the immediate future. It is proposed to expand the campus program of branch libraries and to provide reading rooms in several areas throughout the campus. Branch libraries serving related fields will be located, when possible, within the appropriate building complexes. Further expansion needs will require construction of an undergraduate library building near the present main Library.

Part III: The Campus Today

Growth Since World War II And Outlook for the Future

A record number of students are now enrolled on the Berkeley campus—a total of 23,713 in Fall 1961. This exceeds even the previous high of 23,145 reached during the fall of 1948 when returning GI's flooded onto the campus to use their government-sponsored educational rights. Total enrollment declined after Fall 1948 to a low of 15,327 in Fall 1953. Since that year, however, the total number of students enrolled has risen steadily to its present all-time high (an 8.5 per cent increase in the past year) and all indications bespeak continued, accelerated increases. Berkeley campus enrollment is expected to reach policy-dictated limits of 27,500 students by Fall 1964 or 1965 (see Chapter II, "Academic Prospectus"). The long-forewarned "tidal wave of students" has indeed arrived, bringing with it heavy demands for a wide array of physical facilities.

This rise in student numbers, both recent and anticipated, must be accompanied by staff growth in numbers of teaching, research, and administrative and maintenance personnel. Currently there are 1,350 full-time-equivalent faculty members and about 8,000 full-time-equivalent administrative and research personnel and other non-academic staff on the Berkeley Campus, including the Lawrence Radiation Laboratory. For the ultimate "mix" of 27,500 students it is expected that non-student members of the campus "family" will be sufficient to bring the total daytime campus population to about 40,000 persons.

Since World War II the Berkeley Campus has achieved an impressive record of improvement of its physical facilities—buildings, parking structures, athletic fields, utilities, roads and walks, and landscaping. Appendix D, listing all major permanent facilities now on the campus (but excluding interior building remodelings and other improvements) reveals the extent of new construction that has been realized during this period. Of the nearly 10,000,000 gross square feet of building space now on Berkeley Campus properties (see Table 2 following) approximately half has been added or acquired in the past sixteen years. Furthermore, some 400,000 gross square feet of temporary or obsolete ("non-permanent") space have been demolished during this period to make way for new permanent construction or to improve the quality of campus landscaping and environment.

Some 2,000,000 additional gross square feet of building space is authorized or programmed for construction over the next five years. Appendix E lists these projects as well as those which are proposed for construction in the indefinite future to handle anticipated and in some cases unknown needs for instruction, research, services, housing, etc. That the Berkeley Campus properties are sufficient to handle these demands is revealed in Table 2 by the indication of over 6,000,000 gross square feet of potential building space for both assigned and unassigned building projects. It should be noted, however, that only one third of this potential is on sites on the central campus in Berkeley and very little of this, in turn, is unassigned and unprogrammed space.

TABLE 2

CAMPUS BUILDING DATA SUMMARY
(June, 1962)

Gross Square Feet[1]	*Permanent*[2]	*Non-Permanent*	*Potential*[3]
MAIN CAMPUS AREA	6,802,000	606,000	3,835,000
(Central Campus)	(5,134,000)	(564,000)	(1,926,000)
LRL, CANYON AND HILL AREAS	709,000	173,000	1,635,000
ALBANY AND RICHMOND AREAS	1,035,000	508,000	1,086,000
TOTAL	8,546,000	1,287,000	6,556,000
TOTAL EXISTING	9,833,000		

[1] GROSS SQUARE FEET includes only areas completely enclosed and excludes outdoor seating areas, parking facilities, athletic fields and courts.

[2] PERMANENT includes building under construction as of June 1, 1962.

[3] POTENTIAL is the sum of the estimated capacities of remaining sites.

Recent Accomplishments

1. INAUGURATION OF RESIDENCE HALLS PROGRAM

In 1956 an architectural competition was held for the design of the first of a series of new single-student residence halls, needed to implement previously determined policy of housing at least 25% of the student body in University-owned and -operated facilities. The winning design by the San Francisco architect firm, Warnecke & Warnecke (now John Carl Warnecke & Associates), was the basis for two residence halls groups housing 840 students each and located on College Avenue south of the central campus. So successful have these halls proved to be, both in design and in operation, that a third group of halls, planned and designed by the same firm, is now under construction. At this writing more than 2600 students are accommodated in University-operated single-student residence halls, and continued efforts will be made to provide additional student housing of equivalent caliber. Soon to be completed are 500 apartments for married students, at the Gill Tract, bringing the total of this category to 919.

2. CALIFORNIA STUDENT CENTER

Just as the Berkeley campus had until recently been compared unfavorably with other institutions in regard to its residence halls program, so Berkeley has been below average in terms of the quality and amount of student activities facilities that it provided. Ten years' study of means of correcting this deficiency culminated in the hold-

ing of another architectural competition for the design of the California Student Center. This complex includes a Student Union Building, realized through private financing including student fees and alumni pledges, a Dining Commons (similarly financed except for $200,000 from the State for equipment), parking for 125 cars, and (yet to be built) a Student Office Building and a building to house a 2,000-seat Auditorium and a 500-seat Theater. In 1957 the contract for the design of the first two units of the California Student Center was awarded to the competition winner, a team composed of Berkeley architect Vernon DeMars and Richmond architect Donald Hardison. Located strategically with respect to the academic core of the campus, the Telegraph Avenue business district, and new residence halls, the Student Center facilities have brought great acclaim to the campus and have, since their recent dedication (March 1961), given service and delight to users.

3. CAMPUS LANDSCAPE IMPROVEMENTS

It is generally conceded that the Berkeley campus is endowed with one of the world's distinguished University settings, at the base of the Berkeley Hills and overlooking San Francisco Bay and the Golden Gate. In terms of native and cultivated landscape, the campus has managed to preserve the beauties of its site through continued awareness of the importance of landscape to the quality of campus environment. Through the years many sensitive hands have defended, shaped, and enhanced the creeks, glades, and woodlands that characterize the Berkeley campus.

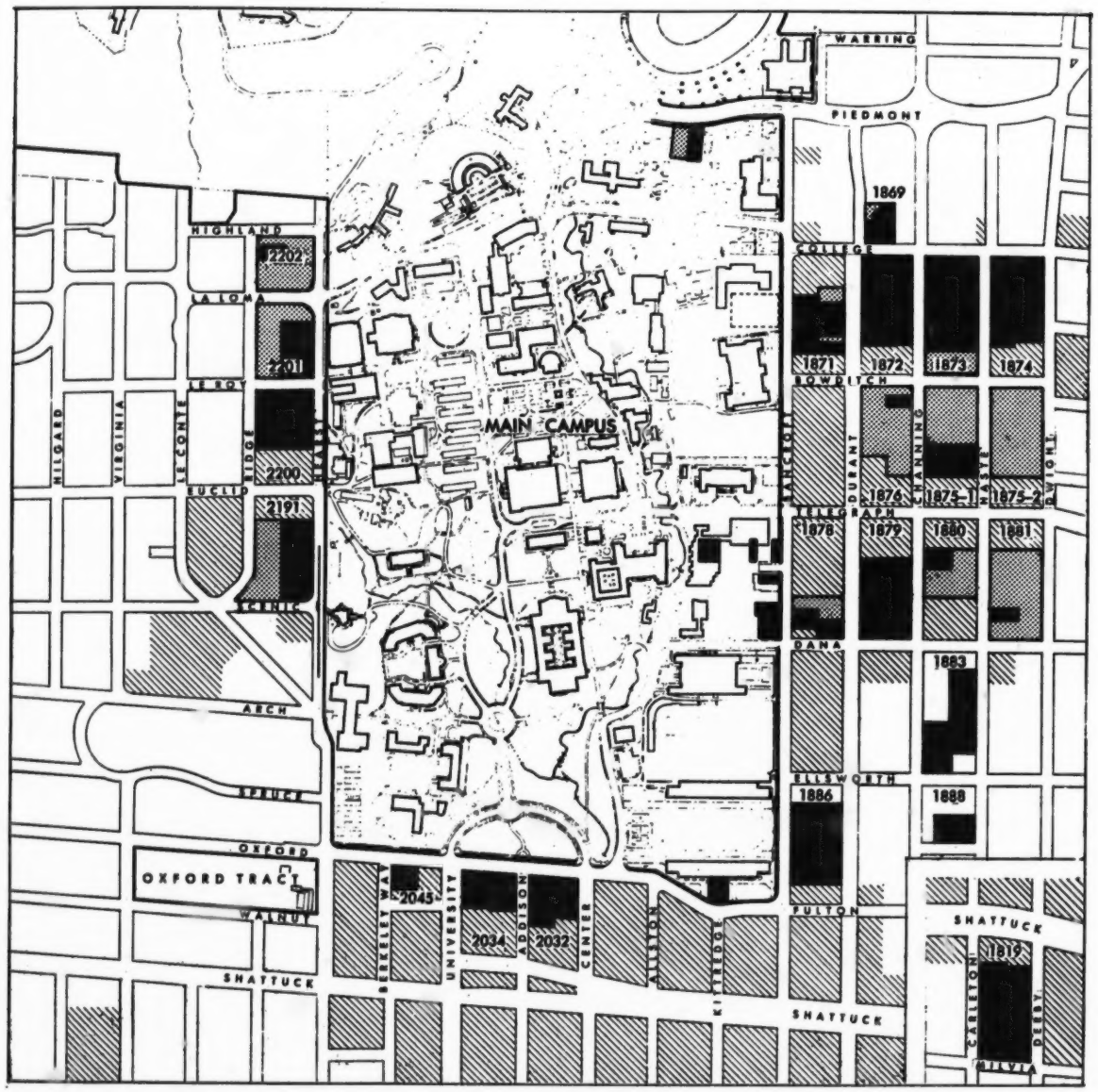
Over two years ago Mr. Thomas D. Church, landscape architect, was engaged to give his attention to Berkeley campus landscape development. Among his charges was the creation of a landscape plan, coordinated with the comprehensive Long Range Development Plan, by which assurance could be had of the continued preservation and improvement of campus ground in the face of increasing pressures for more and more building space.

The landscape plan that has emerged from this assignment is reproduced in the last chapter of this report. By taking into account many factors, such as historical features (Faculty Glade, the Eucalyptus Grove), views and vistas, circulation requirements (relocation of University Drive, refinement of a system of pedestrian walks), treatment of the principal campus entrances, design of formal and natural open spaces and their interrelationships, and the critical and many-faceted problems of relation between buildings and open areas, Mr. Church has evolved a plan designed to maximize the visual qualities of out-of-door campus areas. During preparation of this plan many neglected aspects of campus landscape maintenance were taken care of: areas that had become overgrown and jungle-like were made transparent again; lost vistas were recaptured; forgotten or undeveloped areas of great natural beauty were opened up. And particularly in recent years, landscape details associated with new building projects have been resolved to the mutual advantage of both building and its immediate grounds. Projects "off-campus," as well, have succeeded in introducing the traditional qualities of campus landscape into adjoining urban areas of Berkeley (as, for example, at the new Residence Halls on College Avenue and at University Hall on Oxford Street).

4. LAND ACQUISITION PROGRAM

In December 1952 The Regents approved a program of acquisition of about 45 acres of land adjoining the campus in central Berkeley to provide sites for anticipated campus functions that demanded close-in location. This program was arrived at after long deliberation on ways of solving space problems based on increasing pressures for central campus lands. It had become evident that the lands traditionally thought of as "campus" would soon be inadequate for known needs if all positive visual qualities of the campus were not to be lost.

Accordingly it was determined that proposed new residence halls, necessary augmentation of physical education and recreational fields and courts, peripheral parking facilities, and some academic and administrative functions, could justify such land acquisition. Over the years since 1952 only minor amendments have been made to specific details of the Land Acquisition Program, and full public explanation of the extent of the Program, the reasons for it, and the firm intention not to enlarge it, has been made. This Program is now over 60% complete by area. Table 3, following, defines the areas included in the Land Acquisition Program and its current status.



status as of JUNE 1, 1962

Acquired to date
To be acquired
Major urban uses

Main campus boundaries
Parcel lines
2202 Assessor's block nos.

TABLE 3

STATUS OF BERKELEY CAMPUS LAND ACQUISITION PROGRAM

Area and Block Number	*Now Owned (acres)*	*To be Acquired (acres)*	*Total for U.C. Use (acres)*	*% Complete (by area)*
South—East of Telegraph Avenue				
1869	0.45	0.22	0.67	
1871	1.50	0.36	1.86	
1872	2.68	0.00	2.68	
1873	2.97	0.78	3.75	
1874	2.72	0.00	2.72	
1875–1	0.93	1.86	2.79	
1875–2	0.00	2.80	2.80	
1876	0.15	2.24	2.39	
Subtotal	11.40	8.26	19.66	58.0%
South—West of Telegraph Avenue				
1878	0.59	0.45	1.04	
1879	2.42	0.00	2.42	
1880	0.28	1.27	1.55	
1881	0.16	2.66	2.82	
1883	2.08	0.00	2.08	
1886	2.39	0.00	2.39	
1888	0.61	0.00	0.61	
Subtotal	8.53	4.38	12.91	66.1%
West				
1819	2.86	0.00	2.86	
2032	1.29	0.00	1.29	
2034	1.30	0.00	1.30	
2045	0.35	0.00	0.35	
Subtotal	5.80	0.00	5.80	100.0%
North				
2191	1.27	1.59	2.86	
2200	1.96	0.00	1.96	
2201	0.91	1.55	2.46	
2202	0.17	1.65	1.82	
Subtotal	4.31	4.79	9.10	47.4%
TOTALS	30.04	17.43	47.47	63.3%
Plus On-Campus Acquisition *		.35		
YET TO BE ACQUIRED		17.78		

* One remaining parcel on Piedmont Avenue; area in City street to be abandoned in central campus area (Dana St. north of Bancroft Way) excluded.

Several guiding precepts underlie the Land Acquisition Program; these statements recognize the inevitable problems entailed by campus expansion into private, developed lands:

(1) Appropriate public agencies and specially interested members of the Berkeley community, particularly those owning property in areas adjacent to the campus and affected by campus expansion, should be informed of the land acquisition plans of the University at Berkeley and of the academic reasons which justify these plans.

(2) All information to be made available should conform to the provisions of the 1962 campus plan and to the land acquisition program contained therein, as each may be modified from time to time.

(3) Every effort should be made by the University to avoid disturbance of religious and social institutions and business enterprises, which perform essential community service. They should be assured that according to present plans the University does not contemplate the acquisition of their property.

(4) Owners of property within areas to be acquired by the University should be encouraged to sell their property to the University at a mutually convenient time and should be allowed to retain occupancy, through leasing arrangements, until such time as the property is required for construction.

(5) Agencies related to the University and serving its purposes should be given assistance in finding new and suitable locations when relocation is necessary. Such assistance might include advice on property values, exchanges of property not needed for the University building program, advance purchase of property for exchange purposes, and information on property known to be available for purchase.

5. STREET IMPROVEMENTS

1958 City-University Agreement. Through the medium of the City-University Liaison Committee, a group established in 1953 to bring campus and City of Berkeley officials together on a regular basis for discussion of mutual physical planning problems, a singular accomplishment occurred in 1958. An Agreement made between the University and the City in 1931 had set forth a host of commitments on the two bodies in regard to improvements to be made to various peripheral streets bordering the campus. The joint Liaison Committee, through long discussions of street and traffic problems, was able to revise the 1931 Agreement and to reflect contemporary conditions. The new, 1958 Agreement covers road and street abandonments within the central campus area, sets responsibilities for street widenings in the vicinity of the campus, designates areas for vehicle loading bays, and specifies other trafficways improvements that will be of advantage to both the campus and the City of Berkeley.

Gayley Road. The Berkeley Master Plan states, in part,

> In order to assure the continuing use and availability of Gayley Road, and to permit improvement of it in accordance with the Master Plan, the Board of Regents should either dedicate the street to the City, or grant a public easement, or make other provision for permanent public use of this key thoroughfare.

This artery provides the only connector east of Oxford Street, already congested because of its proximity to the Berkeley central business district, between parts of Berkeley north and south of the campus. Quite naturally, the City is concerned that Gayley Road, a University-owned street available to the public only at the discretion of The Regents, should continue to be available for use. In accord with this request, the Board of Regents in 1958 approved a resolution of intent to keep Gayley Road open for general public use, with the exception of short periods during large-scale events in Memorial Stadium or the Greek Theater. It is hoped also that physical improvements to this road, which provides a principal vehicular access route into the central campus, can be funded in the near future.

Current Problems

The Berkeley campus contains a number of structures built originally for short term use, other structures that have outlived their period of usefulness, and some buildings that have been acquired through campus expansion and put to interim use pending permanent development of their sites. Evidently, if the quality of the campus and its facilities is to keep pace with future need, most of these buildings must be removed and new space found for their occupants.

In certain cases, when a structure has historical worth, is of sound construction, and does not conflict with logical growth plans (e.g., South Hall), rehabilitation or alteration of the building may be appropriate. Even so-called "permanent" buildings often call for nearly continuous remodeling to adjust space to occupant's changing requirements, as in the case of the Life Sciences Building.

BUILDINGS TO BE REMOVED	PROPOSED SITE RE-USE
Ambassador Apartments	Student Office Building
Architects and Engineers	Landscape
Architecture Building	Engineering Building
Art Gallery	Landscape
Astronomy Observatory	Landscape
Band Building (former use)	Landscape
Cafeteria (former use)	Envir. Design Bldg.; Landscape
Callaghan Hall	Power Plant Addn.; Landscape
Chemistry and Annex	Chemistry Unit 2
City and Regional Planning	Engineering Building
Cowell Temporary Buildings	Parking; Landscape
Crocker Laboratory	Physics Building
Decorative Art and Annex	Landscape
Freshman Chemistry Lab.	Physical Sciences Lecture Hall
Mechanics Building	Parking; Landscape
South Hall Annex	Landscape
T 1–2	Mathematical Sciences Building
T 3–10; T 22	Roads; Walks; Landscape
University Extension	Student Office Building
2739–2747 Bancroft Way	Law Building Addition
2 Barrow Lane	Walks; Landscape
2227–2231 College Ave.	Bio-Organic Lab.; reserve site
2220–2250 Piedmont Ave.	Law Building Addition; reserve site

BUILDINGS TO BE ALTERED EXTENSIVELY	
Agriculture Hall	Home Economics Building
California Hall	LeConte Hall (Room 310 only)
Engineering Materials Lab. (plus addition)	Library (4 stages)
Eshleman Hall	Life Sciences Building
Gilman Hall	South Hall (2 stages)
Haviland Hall	Sproul Hall
Hearst Mining Building	Stephens Hall

Community and Regional Planning Considerations

Although virtually all aspects of large scale physical planning for Berkeley, the East Bay area, and the San Francisco Bay Metropolitan Region may be interpreted to have direct or indirect bearing upon the welfare of the Berkeley campus of the University of California, some phases of current extra-campus planning activity have particular application at this time and for the immediate future.

1. CAMPUS ACCESS AND PUBLIC TRANSIT FACILITIES

The years since the War have seen significant changes in transport patterns in the Bay Area and near the Berkeley campus. Most obvious, of course, has been the great increase in the use of the automobile for long distance movement, both as a result of urban decentralization trends (with families moving to suburban areas where the automobile was the only choice of transportation) and as a result of deteriorating public transit services within the older urban areas themselves. Because the campus still faces substantial population growth during the next decade, it is evident that alternative forms of transport to the campus besides the automobile—other means of movement that can allay, rather than contribute to, street congestion and parking shortages—become of direct concern to the campus.

The San Francisco Bay Area Rapid Transit District, created by the State Legislature in 1957, has underway advanced plans for construction of a three-county rapid transit network, one route of which will serve Berkeley near the campus. This system with its proposals for 80-miles-per-hour, automatically controlled electric trains, holds promise of significant assistance in improving access between the campus and various residential and activity centers of the Bay Area. Indeed, the Campus Planning Committee, the campus administration, and The Regents have been in communication with District officials for more than two years, making known the needs of the campus for improved accessibility.

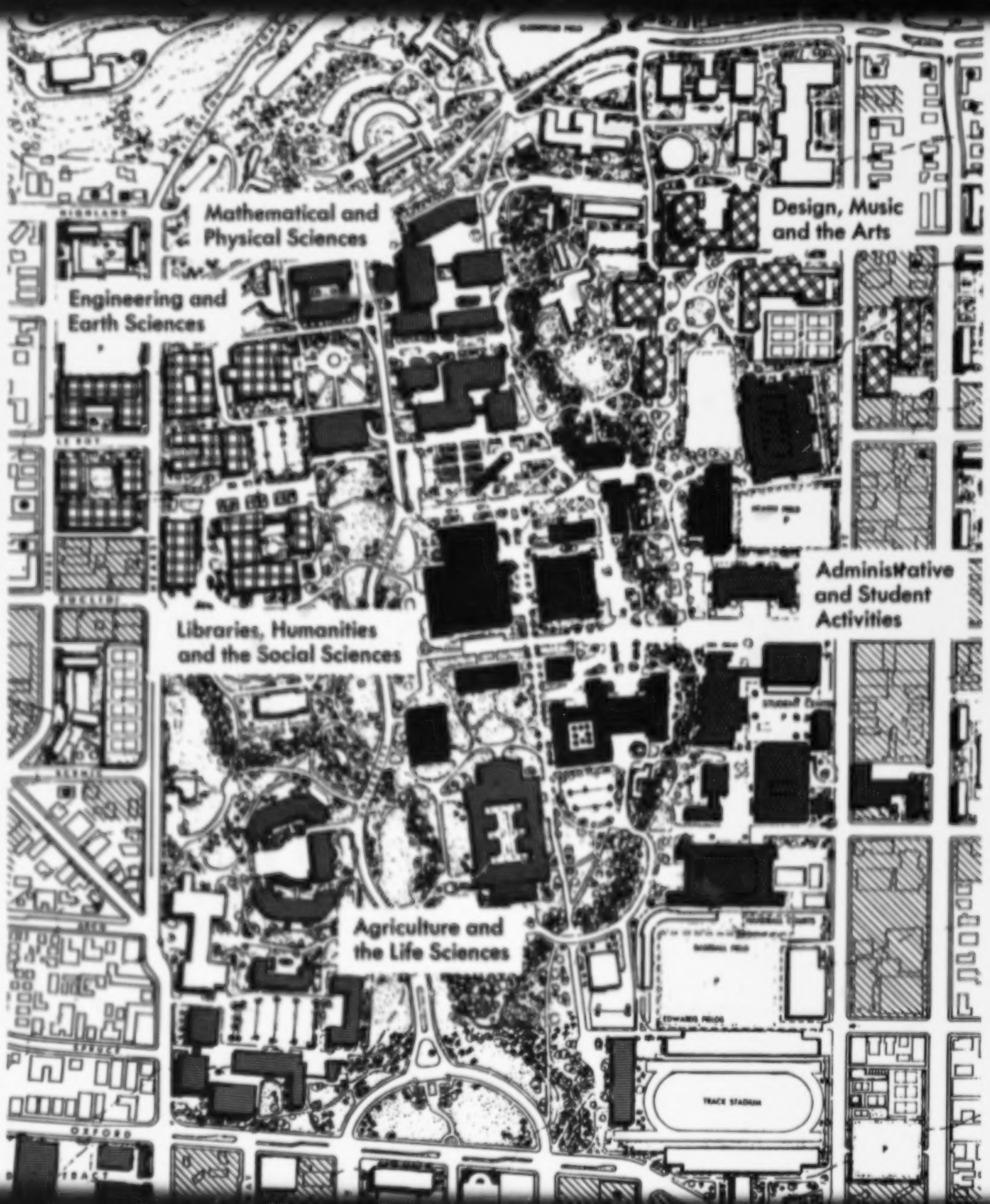
More recently another public agency, the Alameda-Contra Costa Transit District, was formed to assume operation of the former, privately operated company that provided bus transit service throughout the East Bay area and between the East Bay and San Francisco. This changeover took place in 1960, but already improvements in services through new vehicle purchases, increased frequency of schedules, extension of routes, and additions of express-service routes have been substantial. The campus must work with the local transit district to assure itself of maximum service practicable.

2. URBAN RENEWAL

The City of Berkeley has proposed an urban renewal project area south of the central campus and covering generally the blocks between Bancroft and Dwight Ways and between Bowditch and Fulton Streets. Under terms of the Federal Housing Acts of 1959 and 1961, Federal cash grants can be made available for qualified projects to the extent of two-thirds of project cost, with the local community providing the remaining one-third of the cost, either in cash or in non-cash public improvements in the area. In this case the project would be one of "rehabilitation" as opposed to one involving large scale demolition and rebuilding; it is thus not a very costly project, being aimed at arresting incipient blight rather than correcting advanced deterioration. Because here the campus Land Acquisition Program within the project area can qualify as non-cash credits for the City, Berkeley stands to gain excess non-cash credits, for which 2-for-1 matching Federal moneys can be secured for other, and perhaps more critical, urban renewal projects elsewhere in the City. At no cost to the University, an improved campus neighborhood can thus result.

3. POTENTIAL LANDS

Although the campus is firmly committed to a policy of acquiring no additional lands in central Berkeley beyond amounts already specified in the campus Land Acquisition Program, it would be less than prudent if, in view of shortages of usable and appropriately located land, the campus administration were not continually alert to possible land acquisition opportunities. Very recently both the Chaparral Hill tract, consisting of 238 acres of land at the crest of the Berkeley Hills adjoining the campus, and the Richmond Services Center, a 60-acre area with deep water access and containing a building of 500,000 gross square feet, were acquired at very nominal costs and will prove to be of great value to the campus and to various activities that can be located there.



Activity Organization on the Central Campus

Part IV: Long Range Development Plan

Objective and Principles

The foregoing pages have set forth briefly the history and current methods of Berkeley campus planning, a picture of academic, research, and related needs on which physical planning for the campus is based, and descriptions of recent accomplishments and current problems. This material, compiled in summary form in this document, sets the framework for a comprehensive policy statement regarding future physical planning for the University of California, Berkeley.

The Long Range Development Plan, presented subsequently in written and graphic form, is thus a long range, general, flexible guide to future physical growth of the Berkeley campus. In no sense is it a precise blueprint; rather, it is a frame of reference for the more detailed planning of the many individual projects and parts that will comprise the campus of tomorrow. It is subject to continual review and possible change, in order that it may always be abreast of needs and conditions of the time.

Stated here are the major planning precepts that underlie the Long Range Development Plan.

1. OBJECTIVE

The objective of the Long Range Development Plan is to outline an aesthetically and financially sound physical design to meet the academic needs of an enrollment of 27,500 students and associated research and public service functions of the University, without sacrifice of the physical setting of the Berkeley campus.

2. PRINCIPLES

Academic and Research Requirement

Central campus space will be used primarily for academic needs for most academic buildings must be located within a 10-minute class exchange area centering about main library facilities. This 10-minute walking distance limit will necessitate an increase in classroom utilization to meet the needs of an expanding enrollment and will also require that most nonacademic functions and many research units be located in peripheral campus areas or on outlying campus lands.

Because of limited central campus space, it will be particularly important to make full use of outlying properties owned by the University—in ways that will complement activities that must remain in the central campus area. Additional expansion of research activities will occur at the Lawrence Radiation Laboratory, in Strawberry Canyon, and in the upper hill areas of the campus, as well as at the Gill Tract (Albany), the Field Station (Richmond), and the Services Center (Richmond). Where possible, research clusters will be developed to minimize fragmentation of University activities that prosper through closeness to one another. Family housing for married students, out-of-door agricultural research, service and storage facilities, and large scale, low intensity teaching and research activities are examples of uses that will generally be located in these more remote areas.

Building Location, Design, and Use

Campus buildings and facilities on restricted sites will be constructed to the maximum size practicable, consistent with specific need and unique site limitations. Related departments and functions will be located in clusters where possible for reasons of aesthetics, efficiency, and convenience of staff and students. Obsolete and temporary buildings will be removed, and the over-all density of building coverage to land area on the central campus will be limited strictly to 25%.

Landscape, Regional Scenic Assets, and Historical Features

Every measure will be taken to preserve the beauties of the natural setting of the Berkeley campus. The groves and woodlands along Strawberry Creek will set the prevailing feeling for campus landscape, modified by a few areas of formal character, such as the Esplanade and the Mining Circle. Advantages will be taken of views of the Golden Gate, San Francisco Bay, and the Berkeley Hills and other scenic assets wherever possible in building siting and campus design. Historical features, such as South Hall, the University House, Founders Rock, Hearst Mining Circle, and Sather Gate, will be preserved. Major open-area features of the campus will be assiduously guarded and enhanced: the branches of Strawberry Creek, the Central Glade, Faculty Glade, Observatory Hill, the Eucalyptus Grove, and the great backdrop of the Berkeley Hills.

Small Scale Design Elements

Special attention will be given to various detailed aspects of campus design as a means of improving the beauty and usefulness of campus facilities. Such "street furniture" as luminaires, waste receptacles, bicycle stands, and directional and regulatory signs will be subjects of intensive thought and care in their design and placement. Where possible, signs will be applied to pavement surfaces rather than carried on vertical poles. Names of campus buildings will be legible, evident, and designed to harmonize with structures they designate. Attractive stands for student election posters and other such display material will be provided at key campus locations.

Circulation and Parking

A system of pedestrian ways and plazas will facilitate travel on foot throughout the campus. Pedestrian and vehicular traffic will be separated insofar as possible, and vehicular controls will be maintained at campus entrances to prohibit through traffic. A continuing program of peripheral street improvements will be pursued in cooperation with Berkeley and other cities in which campus lands are located. New campus roads will be provided to answer circulation needs in the upper hill areas and other peripheral or outlying lands.

Parking facilities will be provided in surface lots, where possible, for reasons of economy; for visual and functional reasons they will be limited in size. Curb parking will be prohibited except under circumstances of very special nature. Additional parking will be provided underground or in open-deck structures wherever feasible in order to make optimum use of limited land.

Particular efforts will be paid to other transportation media that can help provide access to the campus. Continuing study will be conducted with the public transit agencies to secure the best possible local and rapid transit services to campus areas. Use of still other alternates to the automobile—such as motorscooters and bicycles—will likewise be encouraged.

Land Acquisition

Land in the immediate vicinity of the campus will be acquired in strict accord with previously announced plans, and only for functions requiring central campus proximity. The needs of nearby commercial, religious, and institutional organizations serving the community will be given the utmost consideration consistent with the welfare of the University. Unforeseeable future needs, particularly in burgeoning research-type activities, may require consideration of acquisition of additional lands removed from the central campus.

Campus-Community Relationships

Continuing liaison will be maintained with officials of Berkeley, Albany, and Richmond and with other public and private agencies to help resolve physical development problems of mutual concern.

Major Proposals

With the foregoing planning objective and principles as guiding policy, the Long Range Development Plan has been prepared to define the direction of future physical growth of the Berkeley campus. As an outgrowth and evolution of the version of the Plan adopted by The Regents in 1956, rather than as a "new" Plan as such, it presents the major proposals listed below. Descriptions allude to the three Long Range Development Plan Drawings inside the rear cover of this document.

1. ACADEMIC, RESEARCH, AND ADMINISTRATIVE BUILDINGS

The Plan establishes locations and capacities in terms of building groupings or clusters and firmly limits the over-all density of building coverage on the central campus to 25% of the land surface.

Libraries, Humanities, and The Social Sciences. The core of the campus will consist of the main Library building and a new structure to house an Undergraduate Library, a Social Sciences complex (South, Stephens, Eshleman, and Barrows Halls), and a Humanities complex (Wheeler, Dwinelle, Durant, and California Halls).

The Undergraduate Library is planned for a site northeast of the Life Sciences Building and northwest of California Hall. This site was chosen after careful study of several alternatives, including the conversion of Wheeler or Sproul Hall and construction of new buildings west of the Mining Circle and east of the Life Sciences Building.

The reasons for placing the Undergraduate Library in the proposed location may be summarized as follows:

a. The library will be in the path of students coming:

(1) east from the Biological Sciences complex and the Life Sciences Building
(2) southwest from the Engineering buildings
(3) west from the Physical and Mathematical Sciences
(4) north from the residence halls, Social Sciences and Humanities
(5) south from the Education-Psychology and Agriculture complex

b. The proximity of the Undergraduate Library to the Main Library represents a distinct advantage to students and administration alike.

c. The new library would be on as direct a route as the Main Library to the Student Union, Cafeterias, and to certain departments such as Physical Education, Military and Naval Sciences, which at certain hours of the week are the focus of large student populations.

d. With the new location of University Drive not only will the major east-west vista from University Hall to the Mathematical Sciences Building be safeguarded but also the principal north-south vista on the east side of the Undergraduate Library Building itself.

e. By placing the new library in the site northeast of the Life Sciences Building and northwest of California Hall we create a new central quadrangle with Dwinelle Hall.

f. The location thus selected will spare more easterly sites for the Physical Sciences, Mathematics, and Engineering Departments.

From the points of view of proximity to teaching departments and residence halls, student traffic, future landscaping, and needs of other departments, the proposed site appears most successful.

Administrative and Student Activities. Adjacent to this "core" group of buildings, south across Strawberry Creek, will be the California Student Center (Student Union, Campus Commons, the Auditorium-Theater, a Student Office Building, and the Alumni House) and the buildings housing campus services and administration (Sproul Hall and a proposed building on Bancroft Way near Dana Street). Adjoining these buildings, in turn, will be Harmon and Hearst Gymnasiums, and nearby fields and courts, which will continue to provide for physical education instructional needs of men and women students.

A major unit in this group of buildings is the proposed "Student Services Building" on the south side of Bancroft Way. Construction of this building will allow the replacement of space in temporary buildings scheduled for demolition and will provide appropriate increases in space needs of the department of Physical Education to be met through the removal of the departments of Military and Naval Sciences from Harmon Gymnasium to the new building. It is planned to house the following units in this proposed building:

Accounting
Air Science
Architects and Engineers
Business Office
  Business Manager
  Central Stenographic Bureau
  Central Telegraphic Service
  Inventory Department
  Mailing Division (Campus Station)
  Parking Office
  Police Department
  Purchasing Department
  Residence Halls Office
Committee on Prizes
Committee on Research
Committee on Undergraduate Scholarships
Counselling Center
Custodial Services
Educational Placement Services
Housing Services
Intercollegiate Athletics Department
Military Science Department
Naval Science Department
Personnel Department
Placement Center—Student and Alumni
Public Information

Upon occupancy of this services building the following departments in Sproul Hall can then be provided with additional spaces which they can presently justify:

Admissions Office
Cashier
Custodian
Dean of Students
Dean of Students Special Services
Graduate Division
Letters and Science, College of
President Emeritus R. G. Sproul
Public Ceremonies
Registrar
State Rehabilitation
Summer Sessions
Telephone Exchange

Design, Music and The Arts. In the southeast quadrant of the campus, south of Faculty Glade and the Men's and Women's Faculty Clubs, will be located Environmental Design, Music (Morrison and Hertz Halls), and the Art and Anthropology departments (Kroeber Hall). Also in this general area the Plan denotes the School of Law with a future addition easterly, Cowell Hospital, Optometry, a Bio-organic Laboratory, and some reserve building sites.

Mathematical and Physical Sciences. To the east of the Sather Tower Esplanade will be found the various Physical Sciences complexes—Physics (LeConte and Gilman Halls, LeConte Annex, and a building to be located north of Gilman Hall), Astronomy (most of Campbell Hall), Mathematics and Statistics (part of Campbell Hall and a new major building to rise west of the Mining Circle), and Chemistry and Chemical Engineering (Latimer and Lewis Halls, Low-temperature Laboratory, a structure to replace present "old" Chemistry Building, the present Biochemistry-Virus Laboratory, and a future westerly addition to it).

Engineering and the Earth Sciences. Engineering departments will occupy most buildings in the northeast quadrant of the central campus, with expansion necessary north of Hearst Avenue on both sides of LeRoy Avenue. Earth Sciences departments (Geography, Geology, and Paleontology) will occupy a recently completed building directly west of the Engineering complex and fronting on Observatory Hill open areas. Haviland Hall will be used by Criminology and Social Welfare.

Agriculture and the Life Sciences. Agriculture departments will remain in Agriculture, Giannini, Hilgard, and Mulford Halls, plus laboratory facilities on the Oxford Tract. The northwesterly quadrant of the campus, already containing the School of Public Health (Warren Hall) and Home Economics, will be rounded out by buildings for Biochemistry, Virology, and Health Sciences, and a northerly addition to Warren Hall. Reserve building sites that may be necessary in this sector of the campus are indicated in the Plan for the north end of the Oxford Tract and for a site west of Oxford Street at Berkeley Way.

Biological Sciences departments will in large part remain headquartered in the Life Sciences Building, with future growth of some activities to take place into the northwest area of the central campus; a future building for Biological Sciences expansion is sited at the north end of Edwards Track Stadium.

The School of Education, Psychology, and the Institute of Human Development will be located in a large new building spanning the Arch Street entrance to the campus.

South of Edwards Baseball Field a new Armory is projected, and a small westerly addition to the Power Plant is shown north of Edwards Baseball Field. The former California Farm Bureau building, west of Edwards Track Stadium, has been recently acquired and will be occupied by University Extension activities.

East of Gayley Road. East of Gayley Road and Piedmont Avenue, Bowles and Stern Halls and International House will retain their student residence functions, as will the Fernwald complex at the easterly end of Dwight Way. Memorial Stadium and the Greek Theater will continue to be used for large scale out-of-door spectator events.

In lower Strawberry Canyon directly east of Memorial Stadium, the former corporation yard has been removed (to the Services Building, southwest of the central campus)

and in its place is a development of fields, courts, and family recreation facilities (the Haas Clubhouse and the Stern Pool) that are intensively used by the campus community.

The remainder of the Strawberry Canyon and hill areas of the campus will be used for a variety of teaching and research activities. The Lawrence Radiation Laboratory, specializing in teaching and research in the nuclear sciences, will see a major expansion of facilities both within its main complex on the west-facing slopes above the central campus and within the central parts of Strawberry Canyon to the east.

Strawberry Canyon and hillside areas above it will lend themselves, further, to other functions requiring building sites: a Seismology Station, an Animal Behavior Research Station, and possibly a proposed Space Sciences Laboratory. A public science museum, the Lawrence Hall of Science, is projected for a commanding site on a hilltop above the Lawrence Radiation Laboratory near Grizzly Peak Boulevard. Open land uses in Strawberry Canyon, such as the Botanical Garden and the numerous tree plantations, will be retained for use by the campus and for the enjoyment of the public in general. Chaparral Hill, recently acquired, will be appropriate for future research uses.

South of the Central Campus. The areas adjacent to the central campus and defined in the official Land Acquisition Program are designated for use only by campus activities and functions that must have close-in locations but for which insufficient room exists on the campus itself.

To the south the Plan indicates complexes of student residence halls with associated intramural fields and courts, a new "Student Services Building," the recently completed Jones Child Study Center, instructional areas for physical education, and several off-street parking structures both below grade (under fields and courts) and above ground. All these functions have been carefully located both in relation to the campus and with respect to established community uses such as the Telegraph Avenue business district and the numerous churches and private institutions in the area.

North and west of the Central Campus. North of campus, acquisition is being limited to portions of the blocks fronting on Hearst Avenue between Scenic Avenue and Highland Place (excepting the Euclid Avenue business district); here sites are allocated to two major buildings for Engineering, two residence halls groups (one of which, near Scenic Avenue, may be built by the University Students' Cooperative Association), and two sites for parking surmounted by intramural fields and courts.

West of the central campus the Land Acquisition Program has been completed, with properties specified for University Press, a parking structure (which will be enlarged vertically to accommodate the University Garage), University Hall (Statewide University administration), and a reserve building site. Compatibility with the adjacent Berkeley central business district has been an important criterion in determining use of these areas for University purposes.

Outlying Properties. On the various outlying properties of the Berkeley campus, various academic and research activities have been and will be established to relieve serious pressures upon central campus space. Too, certain kinds of uses here contemplated would, because of their nature or scale of operation, be inappropriately located amid the dense populations that are to be found on the central campus. To this end, the Gill Tract, the Richmond Field Station, and the Richmond Services Center provide outlets where such functions may be sited without detriment to other campus operations.

The GILL TRACT, 3 miles removed from the central campus, will contain an agricultural research complex of both laboratory buildings and open plot cultivations, as well as a 930-family community for married students and a general use area containing a reserve building site.

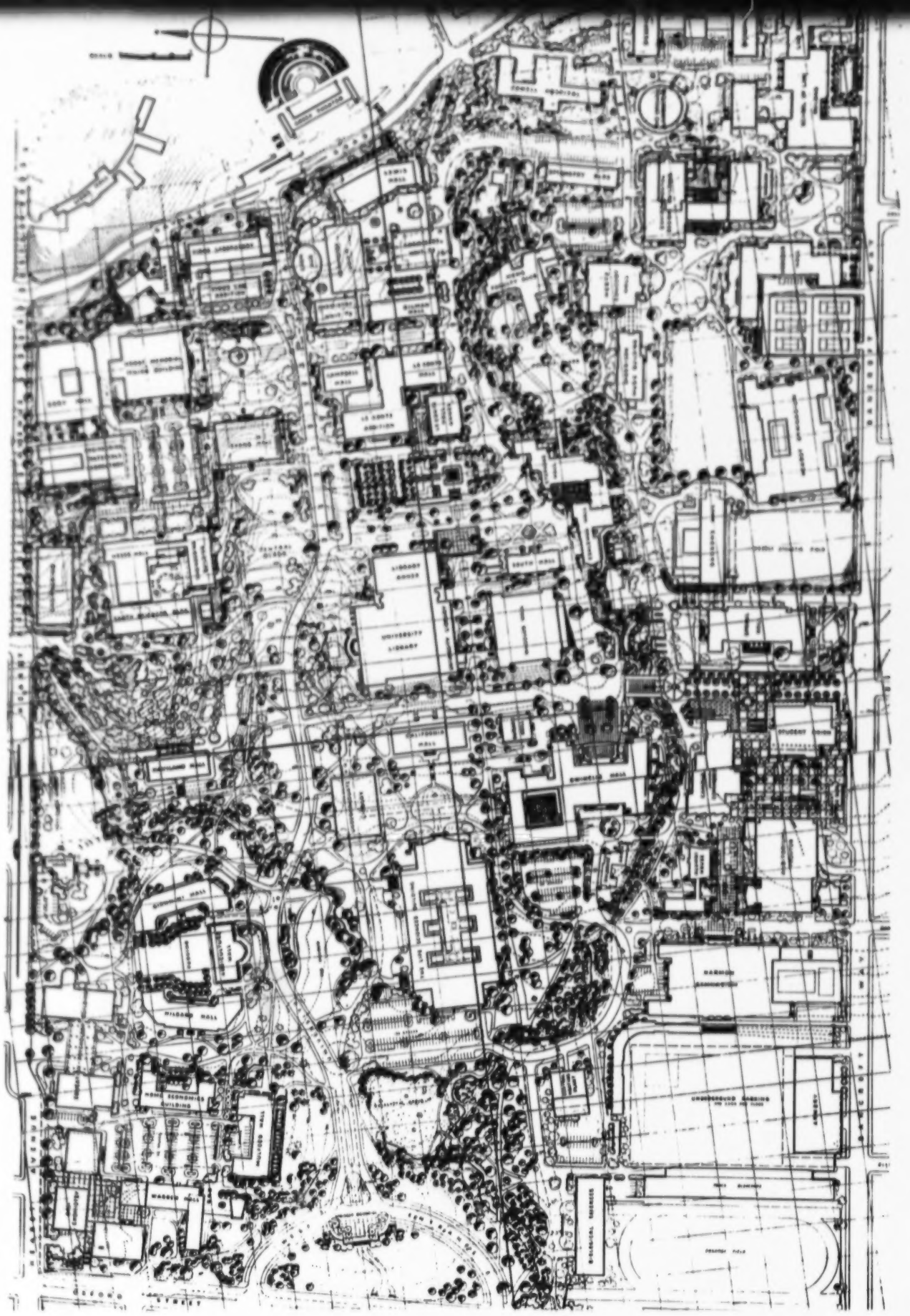
The RICHMOND FIELD STATION, 7 miles distant, will be a working research complex primarily for Engineering departments and related groups, but accommodating the Forest Products Laboratory as well; it will provide such unique features as extensive paved yard spaces and "incubator" areas, where new or short term specialized experimentations may be undertaken with minimum concern for "appearance." The Richmond Field Station offers ample reserve areas for additional, unforeseen activities.

The RICHMOND SERVICES CENTER (recently acquired from the Ford Motor Company) can accommodate large scale storage needs of the University and is contemplated for use by other service and research functions, including possibly University Press's printing operations, that can make good use of the extensive enclosed space (nearly a half million square feet) that the principal building provides.

Finally, the 10-acre BLAKE ESTATE in Kensington, 4 miles north of the campus, is a residential property specified by the donor, Anson Blake, for use of its highly developed garden plantings by the Department of Landscape Architecture, thus insuring utilization compatible with the high-quality residential area in which it is located.

2. LANDSCAPE AND OPEN SPACES

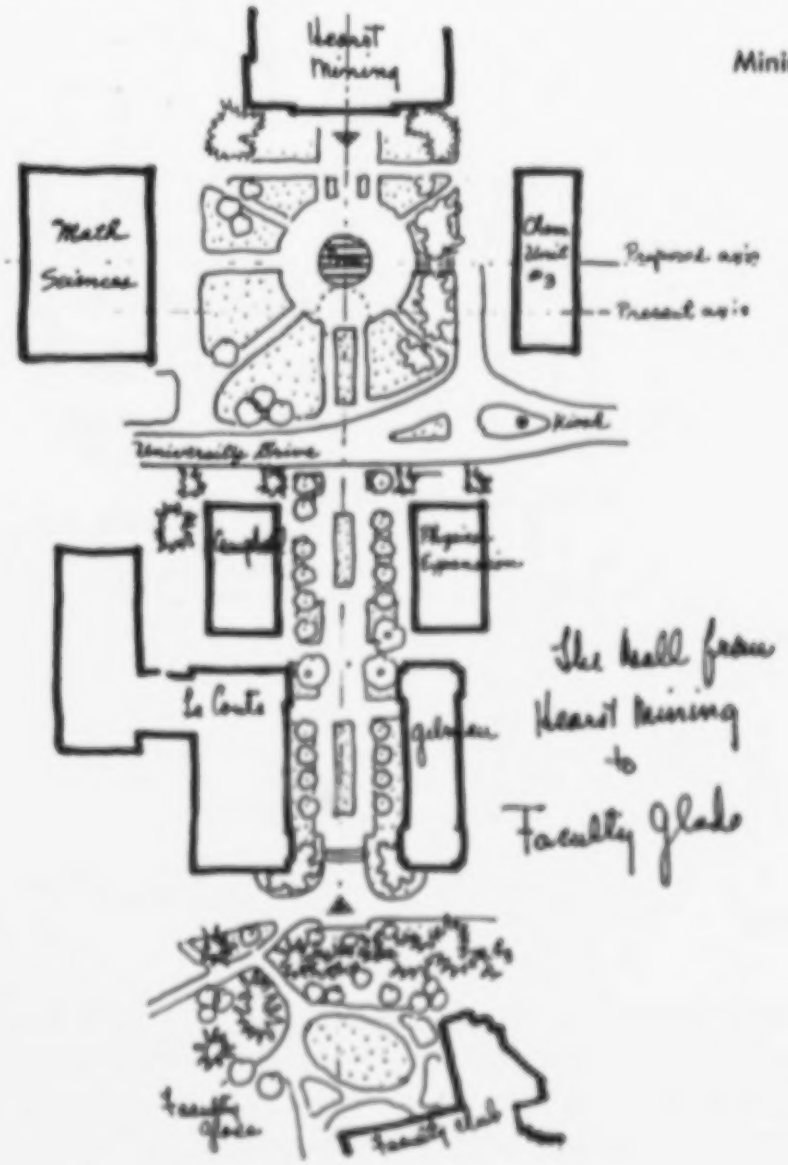
The Plan defines permanent open spaces and areas of special landscape treatment necessary to preserve the unique visual character associated with the Berkeley campus. Principal features whose natural or traditional qualities are to be retained and enhanced are the two branches of Strawberry Creek, the Central Glade, Faculty Glade, the Eucalyptus Grove near the West Entrance, Observatory Hill, and the "background" of the campus formed by the steep slopes of the Berkeley Hills.



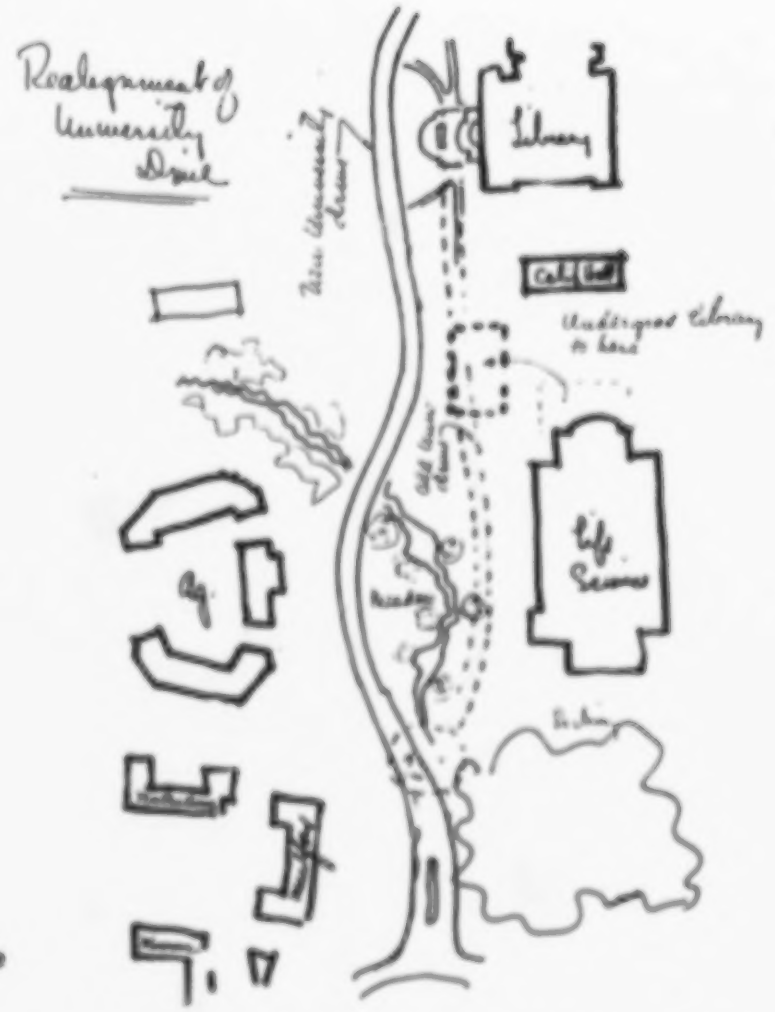
CENTRAL CAMPUS LANDSCAPE PLAN

Prepared by Consulting Landscape Architect Thomas D. Church as an amplification of the Long Range Development Plan

Significant open areas whose more formal, urban aspects will dominate include the Esplanade at Sather Tower, the Hearst Mining Circle (relocated slightly northward as on the sketch, below, from the Landscape Plan report), and its axial southerly extension, Dwinelle-Wheeler and the California Student Center Plazas, the University House Garden, and the West Crescent and Springer Gate.



Mining Circle

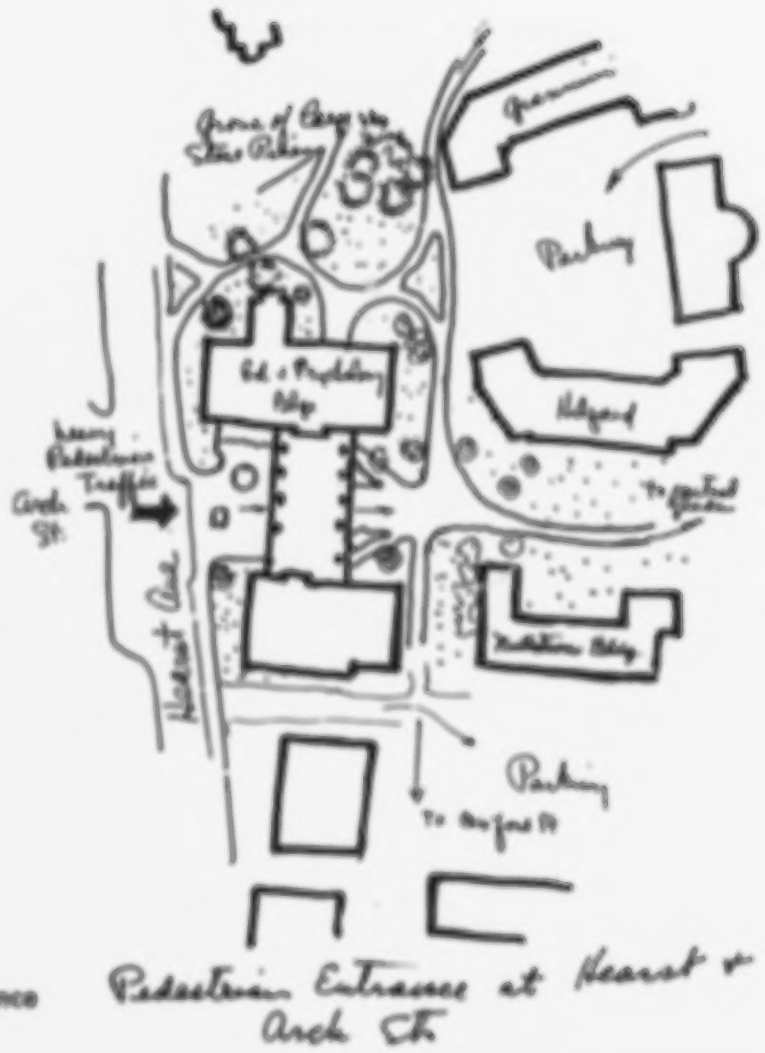


University Drive

University Drive will be relocated to the north of its present location (as on the sketch, above, from the Landscape plan report), thus permitting proper views of the Life Sciences Building and the main Library building; a new pedestrian plaza will be built in front of the Library entrance.

The major campus entrances—Telegraph Avenue at Sather Gate, College Avenue Plaza, Euclid Avenue (North Gate), Springer Gate at the West Crescent, and the entrance on Hearst Avenue opposite Arch Street and spanned by the Education-Psychology Building—will be given special landscape treatment, for they are the main arrival points for persons approaching the Berkeley campus. (See typical sketches, below and to the right, from the Landscape Plan report.)

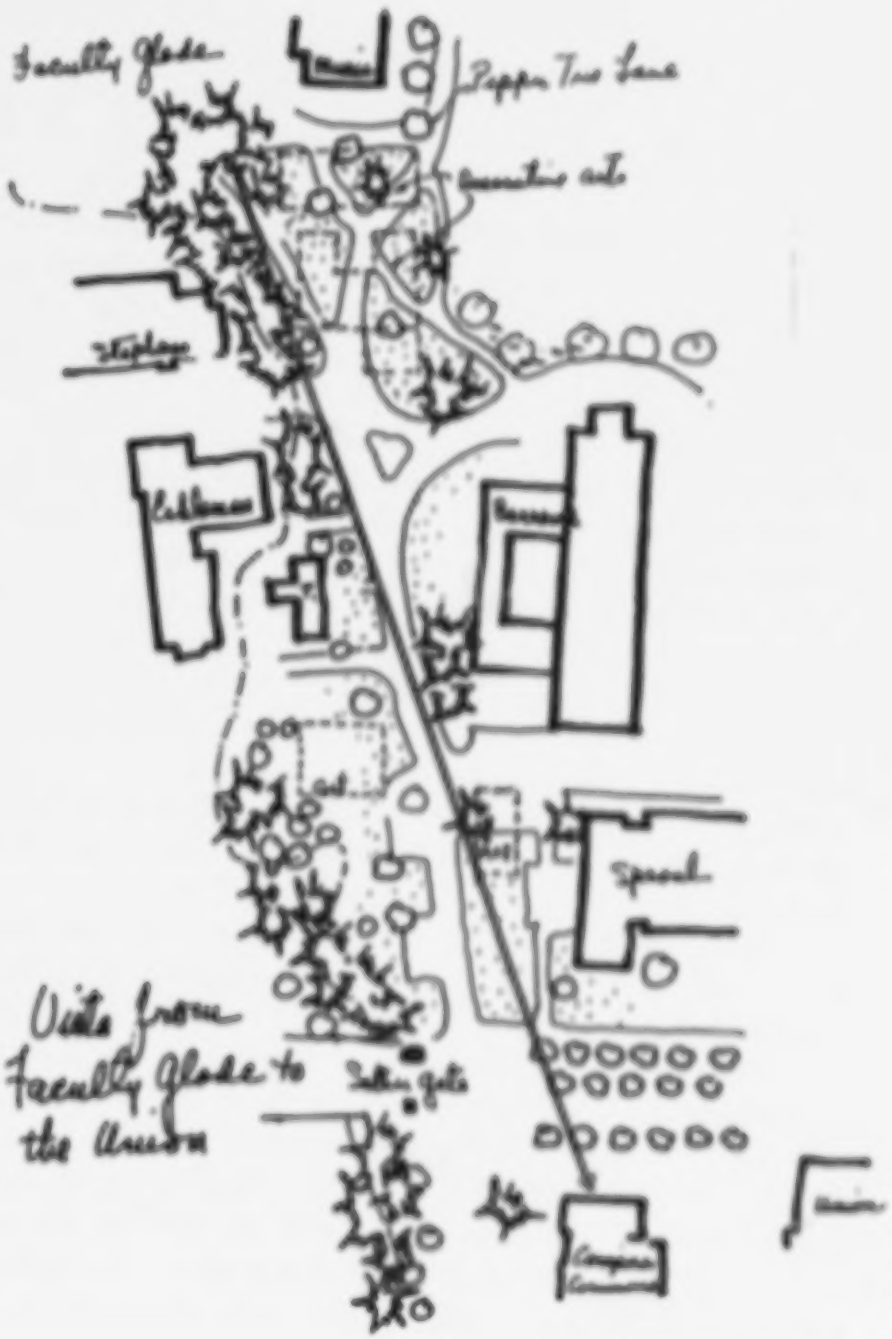
College Avenue Entrance



Arch Street Entrance

Pedestrian Entrance at Hearst & Arch St.

Within the central campus itself, pedestrian walks, glades, lawns, sitting areas, sculpture, and fountains will lend special personality to different parts of the campus, while at the same time the unity of the larger aspects of campus landscape will dominate.



Faculty Glade Extension

Where the campus has expanded into the urban pattern surrounding the traditional campus limits, particular attention will be paid to extending the visual qualities of campus landscape into these new areas. Thus the removal of overhead wires adjacent to and near the campus is regarded as most desirable. The residence halls on College Avenue and recent developments on the west side of Oxford Street, where street trees, spacious building approaches, and perimeter planting have been effected, exemplify this extension of campus landscape character; similar results can be expected as the campus building program proceeds.

As formerly undeveloped areas are utilized for campus purposes, as for example at the Lawrence Radiation Laboratory and in Strawberry Canyon, new stands of trees and added foliage will be incorporated on a systematic basis to soften the visual appearance of new developments from both within and without. The Gill Tract and the Richmond Field Station will have protective screen plantings at their perimeters, for reasons both of appearance and of insulation from nearby urban uses.

3. ACCESS, CIRCULATION, AND PARKING

The Long Range Development Plan sets forth proposals for coordinated solution to problems of access to the campus, intra-campus pedestrian and vehicular circulation, and automobile parking.

Access. The City of Berkeley Master Plan makes clear the need for a balance between a good arterial street pattern and a highly developed public transit service, including both local bus routes and rail rapid transit. The Long Range Development Plan thus recognizes Euclid, Spruce-Oxford, University, Shattuck, Ellsworth and Fulton, Telegraph, and Warring-Piedmont as major radial approach routes to the campus, and Haste and Dwight, Oxford-Fulton, and Cedar as principal circumferential streets; these arterials set the framework for community circulation. Oxford-Fulton, Bancroft and Durant, Piedmont-Gayley, and Hearst, bordering the central campus, serve as feeder access streets to the inner campus areas. In addition, hill-area roads in the Lawrence Radiation Laboratory and Strawberry Canyon will be improved and extended to permit access to all developable lands east of the central campus; a new route connecting Strawberry Canyon with Grizzly Peak Boulevard will be constructed. Other than Gayley Road, which will be kept open to the public except during special events, such as activities at Memorial Stadium or the Greek Theater, most roads within campus limits will not permit "through" traffic.

Local public transit will be provided over most of the above-named arteries and will relate to the proposed regional rapid transit system, whose principal Berkeley station will be under Shattuck Avenue in the Berkeley central business district.

Inner campus roads. Within the central campus, University Drive will be realigned for functional and aesthetic reasons and will remain a controlled-access road over which through traffic will not be permitted. University Drive, supplemented by cul-de-sac roads from streets peripheral to the central campus, will provide entry to campus parking areas and service access to campus buildings. Passenger loading areas will be provided for vehicles at major campus entrances.

Similar internal circulation schemes, adapted to local needs, will be provided for the Gill Tract (Albany) and the Richmond Field Station.

Parking. Approximately 12,000 automobile parking spaces will be needed throughout campus areas. The Plan suggests some 3,500 spaces to be provided on the central campus, 4,000 spaces in adjacent areas outside the central campus, nearly 3,000 spaces serving the Lawrence Radiation Laboratory and other hill-area development, and about 1,500 spaces distributed on the several outlying campus properties. Continued study will dictate the precise amounts to be allocated between commuter and resident parking facilities, and among faculty, staff, and students.

Where economically feasible and where land area and aesthetic considerations permit, these spaces will take the form of surface parking lots, usually containing 100 cars, or less, each. It will be necessary, however, particularly on the central campus and in immediately surrounding development, to provide open-deck or underground parking structures in order to make maximum use of valuable land and in order to supply parking close to sources of demand. Curb parking will be prohibited except in cases of extreme hardship.

Facilities will be provided for the parking of motor-scooters, bicycles, and small-size cars, especially on the central campus and in adjacent areas, where the demand for such spaces is most intense.

Campus pedestrian ways. The Plan indicates a complex network of pedestrian walkways and plazas covering the central campus and surrounding areas. The main campus entrances for pedestrian traffic (Telegraph, College, Euclid, and Arch) are connected with the campus core (extending from the Library to the California Student Center and from Barrows Hall to the Life Sciences Building) by broad avenues restricted exclusively to foot traffic. Within the core area, where pedestrian movement is most concentrated, these walks open up into large squares or plazas of strong urban flavor. Lesser walks interconnect the various sectors of the campus with the core, the main walks, and each other.

4. RESIDENCE HALLS AND OUTDOOR SPORTS FACILITIES

The Plan provides sites for single-student residence halls, apartments for married students, and fields and courts for instructional and recreational use.

Single-student residence halls. In accordance with The Regents' policy of providing housing for 25% of student enrollment, the Long Range Development Plan proposes residence halls development both south and north of the central campus. In addition to the older residence halls—Stern, Bowles, and Fernwald—and following the pattern set by the two recent residence halls groups on College Avenue, four additional residence halls groups accommodating more than 800 students each will be built on the blocks on either side of Telegraph Avenue, south of the campus. To the north, two additional 600-student residence halls groups will be built—one of which, on Scenic Avenue, may be developed by the University Students' Cooperative Association rather than by the University.

At least one of these proposed groups of residence halls will be for graduate students; in addition, a site at Durant and College has been specified for a smaller residence hall for specialized occupancy.

Married student housing. The Plan suggests the development of most of the Gill Tract in Albany for a married students' community to accommodate about 930 families.

Within this neighborhood of two- and three-story apartment buildings will be related facilities: children's play areas, a central common or park, a community activities building, and adult recreation fields and courts. At some future date it may be desirable to increase the amount of married student accommodations beyond the 930 units proposed in the Plan, but at present no additional lands are available and appropriate for this use.

Outdoor Sports Facilities. Indicated in the Long Range Development Plan as both on and near the central campus are areas to be devoted to fields and courts. Areas near Harmon and Hearst Gymnasiums are to be used primarily for physical education instruction. Other such facilities, for the most part adjacent to existing and proposed residence halls, will be utilized for intramural sports and casual recreation. Where possible, dual use of land will be made by the development of parking facilities underneath fields and courts areas. Memorial Stadium and the Edwards Fields will be reserved primarily for spectator sports and intercollegiate contests; Edwards Fields will continue to be used for military drill by R.O.T.C. units.

5. LAND ACQUISITION

The Plan calls for completion of a firm program of land acquisition, adopted in 1952 and modified in 1956 and 1957, of about 45 acres of close-in lands, needed for facilities that must be centrally located and for which there is no space on the campus proper. These facilities include the single-student residence halls, fields and courts, and parking structures, mentioned earlier. Also to be included are a new "Student Services Building," a University Arts Center, and the Jones Child Study Center (existing) south of the campus; and academic expansion for the College of Engineering north of Hearst Avenue.

At the current time this land acquisition program is over 60% completed and represents definite limits to territorial expansion of the campus in central Berkeley. In continuation of earlier-established policies, the program will endeavor to avoid disturbance of such community and institutional uses as the Telegraph and Euclid Avenues business districts, the College Women's Club, the Berkeley Women's City Club, the Durant Hotel, and the major churches and religious organizations near the campus that contribute so importantly to community values.

Part V: Appendices

A. COMMITTEE MEMBERSHIPS

1. Campus Planning Committee

Members:

Glenn T. Seaborg, Chancellor (Chairman through January 1961)
Edward W. Strong, Chancellor (Chairman)
Orvin W. Campbell, Business and Finance Officer
Thomas D. Church, Consulting Landscape Architect
Louis A. DeMonte, Campus Architect and Head, Office of Architects and Engineers
Sanford S. Elberg, Chairman, Committee on Buildings and Campus Development Through November
Elmo R. Morgan, Vice President—Business
David W. Reed, Chairman, Committee on Buildings and Campus Development December 1961 and Subsequently
William W. Wurster, Consulting Architect and Dean, College of Environmental Design

Advisers:

Adrian A. Kragen, Professor of Law and Vice Chancellor—Administration
Alden H. Miller, Professor of Zoology and Vice Chancellor—Academic Affairs
Donald H. McLaughlin, Member, Board of Regents
Robert J. Evans, University Architect and Head, Statewide Office of Architecture, Engineering, and Planning

Technical Staff:

Louis A. DeMonte, Campus Architect and Head, Office of Architects and Engineers
Charles R. Routsong, Planning Analyst, Office of Architects and Engineers
Lindley R. Sale, Administrative Analyst, Office of the Chancellor
Charles D. Tefft, Associate Planner, Office of Architects and Engineers (Secretary June 1961 and subsequently)
Albert R. Wagner, Associate Planner, Office of Architects and Engineers (Secretary through May 1961)

2. Liaison Subcommittee of the Campus Planning Committee

Members:

Richard L. Jennings, Professor of Law (Chairman)
Milton Chernin, Professor of Social Welfare and Dean, School of Social Welfare (Vice Chairman)
Orvin W. Campbell, Business and Finance Officer
Louis A. DeMonte, Campus Architect and Head, Office of Architects and Engineers
Gordon Hearn, Professor of Social Welfare (through December 1961)
Richard P. Hafner, Jr., Public Affairs Officer (January 1962 and subsequently)
Adrian A. Kragen, Professor of Law and Vice Chancellor—Administration
Frank H. Miller, Assistant Business and Finance Officer
Charles D. Tefft, Associate Planner, Office of Architects and Engineers (June 1961 and subsequently)
Albert R. Wagner, Associate Planner, Office of Architects and Engineers (through May 1961)

3. Administrative Committee on Buildings and Campus Development, Academic Years 1956–57 through 1961–62

C. W. Brown (56–59)
(Chairman 56–59)
S. S. Elberg, (56–57, 58–61)
(Chairman 59–61)
D. W. Reed (59–62)
(Chairman 61–62)
M. S. Beeler (56–60)
G. M. Briggs (61–62)
L. A. Bromley (57–58)
E. H. Burness (58–62)
E. L. Burdick (56–57)
K. H. Cardwell (59–62)
R. A. Cockrell (56–59)
S. F. Cook (57–60)
R. Craig (59–62)
L. E. Davis (59–62)
W. G. Dauben (56–57)
L. A. DeMonte (56–62)
E. R. Dempster (57–59)
R. L. Doutt (56–58)
W. B. Fretter (56–57)
C. F. Garland (56–58)
C. C. Gilliam (56–62)
J. J. Gumperz (61–62)
W. D. Gwinn (58–59)
W. C. Helmbold (59–60)
F. M. Henry (56–57)
J. F. Hopkins (57–58)
J. W. Hutchison (56–61)
R. W. Jennings (56–62)
P. F. Keim (56–57)
R. F. Kerley (58–60)
A. F. Kip (57–58)
H. J. Lagorio (57–58)
J. J. Lynch (57–58)
L. Machlis (58–60)
S. J. Maisel (58–59)
R. W. Marston (58–59)
J. L. Meriam (58–59)
M. A. Milczewski (58–60)
F. W. Miller (61–62)
W. W. Monahan (56–58)
P. L. Morton (57–58)
L. Nelson (56–57)
C. L. Nordly (57–61)
W. B. Quay (61–62)
T. L. Reller (61–62)
D. A. Revzan (56–60)
C. R. Routsong (56–62)
L. R. Sale (59–62)
D. E. Savage (60–61)
R. F. Steidel (61–62)
C. D. Tefft (61–62)
R. L. Thornton (58–62)
C. A. Tobias (59–61)
F. E. Tregea (59–62)
G. E. Troxell (57–61)
H. L. Vaughan (59–60)
T. Vermeulen (60–62)
M. J. Voigt (57–58)
A. R. Wagner (59–61)
R. N. Walpole (60–61)
H. M. Worden (56–57, 60–62)
W. W. Wurster (56–57)
J. A. Zivnuska (59–62)

B. EXCERPT FROM THE BERKELEY MASTER PLAN

The Master Plan adopts the following planning policies related to the City and the University of California:

1. The Campus Development Plan appears to be a reasonable compromise between the land needs of the University and the limited land resources of the City. Campus expansion should be limited to lands that are essential, and the Telegraph Avenue shopping center should not be disturbed. Insofar as possible, major religious, social, and other institutions that serve the students and the community should be permitted to remain. Land developed for University purposes should not be scattered through the areas adjacent to the Central Campus, but should be planned as contiguous extensions of the Campus itself. Expansion beyond the limits indicated on the 1956 plan should not take place, and the City should encourage optimum private development of this business and residential property.
2. University-owned property along the west side of Oxford Street in the Central District, except for the University Press, should either be developed for University purposes in harmony with the Central District or returned to private ownership to permit its development for suitable commercial uses.
3. In order to assure the continuing use and availability of Gayley Road, and to permit improvement of it in accordance with the Master Plan, the Board of Regents should either dedicate the street to the City, or grant a permanent easement, or make other provision for permanent public use of this key thoroughfare.
4. Campus planning should make provision for off-street passenger loading spaces at major campus entrances.
5. The City, the University, and the Associated Students should work together to find ways to provide off-street parking facilities for students, University personnel, shoppers, and the general public. Arrangements should be made for joint use of University provided parking facilities when they are not in full use and replacement of the Sather Gate Parking Lot.
6. The City and the University should cooperate in the development of the University-owned Berkeley hill lands in accordance with the recommendations of the Recreation portion of the Master Plan.
7. The visual effect of important new University buildings, as seen from Berkeley City streets, should be a consideration in their design and location.
8. A campus landscape plan should be developed which will integrate City and University, inviting the citizen into the campus.
9. The City should improve the main thoroughfares leading to the campus, as well as the streets surrounding the campus, with street planting and should otherwise enhance campus approaches.
10. City Planning and zoning should encourage the use of private properties in the University neighborhood in ways that will harmonize with the beauty and dignity of the campus.
11. In order to achieve the degree of cooperative planning which the Planning Commission believes is vital to the future interests of both the City and the University, a liaison committee with clearly defined authority should be continued for the mutual exchange of information and for the review of plans and proposals.

C. PRINCIPLES OF CAMPUS SPACE ASSIGNMENT AND UTILIZATION

The following statements were approved by the Chancellor of the Berkeley campus on March 14, 1961, and are reproduced here in their entirety. They are designed to insure the fullest scrutiny practicable in achieving optimum use of campus building space.

I Procedure of Space Assignment

a. The Registrar is the Space Assignment Officer appointed by the Chancellor, and as such is responsible for all assignments of space in existing buildings to departments or organized units of the Berkeley campus. The Registrar performs this function in consultation with the Chairman of the Administrative Committee on Buildings and Campus Development.

b. The Chairman of a department or equivalent head of a campus unit shall be charged with the responsibility for effective use of the space assigned to his unit. Accordingly, he shall be responsible for the ordinary assignment and reassignment of space within his unit. He shall not assign space to emeritus professors.

c. An individual faculty member (except emeritus professors) shall normally present his needs for space to the chairman of his department or head of his unit, who, if he approves the request, shall transmit it to the Space Assignment Officer. In the event of a disagreement, the chairman shall, at the request of the faculty member, transmit his request, together with his recommendation, to the Space Assignment Officer.

d. Emeritus professors shall apply for space directly to the Space Assignment Officer.

e. The Space Assignment Officer may dispose of the routine requests directly, but shall refer all requests involving space assignment policy to the Subcommittee on Space Utilization or to a building subcommittee, as he deems appropriate.

f. Building subcommittees on space utilization shall report their recommendations to the campus Subcommittee on Space Utilization for review.

g. The campus Subcommittee on Space Utilization shall make recommendations to the Space Assignment Officer on all applications referred to it by that officer or by a building subcommittee.

h. In the event that a request for space involves considerations outside the purview of the Subcommittee on Space Utilization (e.g., remodeling or removal of a temporary building, expenditure of funds not in the unit's budget, assignment of space in new buildings, campus landscaping, etc.), the Subcommittee shall refer the request to the Chancellor's Administrative Committee on Buildings and Campus Development for recommendation to the appropriate officer of the administration.

II Principles Regarding the Assignment of Space to Regular Faculty Members

a. The assignment of space in existing buildings shall be based on a continuing study and analysis of needs, in the light of administrative policies regarding balanced academic growth of all campus units.

b. Every regular member of the faculty shall be assigned an office for his academic work. This need shall receive the highest consideration among requests for office space.

c. When the limitations of available space preclude the assignment of a single-occupancy office, the appropriate de-

partment and building subcommittee shall work out the next best possible arrangement so that no regular faculty member will be without suitable office space for his academic work.

d. Faculty members whose appointments are split between two departments or units shall normally be entitled to only one office on an exclusive tenancy basis.

e. Low priority shall be given to assigning an office on an exclusive tenancy basis to a part-time faculty member or lecturer.

f. Assignment of space to a campus unit for the use of teaching assistants shall be made on a basis of two teaching assistants per desk.

g. Assignment to individual members of the faculty of large blocks of space such as experimental or laboratory rooms shall be made only when it is shown that the space will be used effectively (e.g., by graduate students of the faculty member, or to house large pieces of special apparatus or large amounts of materials required in the faculty member's scholarly work). High priority shall be given to the multiple-use assignment of large blocks of space.

h. The practice of rotating the assignment of large blocks of space among different faculty members in order to achieve effective use of space shall be encouraged (e.g., when a faculty member takes a long leave of absence from the campus).

i. Continuance of use of space by departments and organized units may be subject to periodic review by the Space Assignment Officer, with the possibility of reassignment of space not being effectively used.

III Principles Regarding the Assignment of Space to Emeritus Professors

a. When available, office space shall be provided to emeritus professors who desire and need space to continue their scholarly or creative work, but not for any other purpose.

b. Whenever possible, locked storage space will be made available to house the private libraries of emeritus professors, thus releasing private office space.

c. The granting of space to emeritus professors shall not adversely affect the quantity or quality of space provided regular faculty members.

d. Emeritus professors who wish space assigned to them shall annually request it of the Space Assignment Officer and state the purpose for which it is to be used.

e. Requests for space by emeritus professors shall be evaluated by the Subcommittee on Space Utilization. Assignments of space shall be made directly to the emeritus professor by the Space Assignment Officer.

f. The effectiveness of use of space assigned to emeritus professors shall be reviewed annually by the Subcommittee on Space Utilization. Space which is not effectively used shall be reassigned by the Space Assignment Officer.

IV Principles Regarding the Assignment of Space to Special Functions

a. In general, space will be assigned to special functions only if there is extraordinary justification for the assignment.

b. The needs of non-academic employees for space additional to their working quarters shall be examined and evaluated in respect to both new and existing buildings.

c. Requirements for commons and conference rooms shall be examined and evaluated in respect to both new and existing buildings.

d. Special space requirements related to student welfare beyond those within the province of the Associated Students of the University of California shall be examined and evaluated in respect to both new and existing buildings.

e. Activities of University Extension may be housed on the campus only if they can be accommodated without depriving regular academic functions of essential space. As a general rule, the Berkeley campus is not responsible for housing University Extension activities.
f. Non-University agencies may be assigned space on the campus only if it can be demonstrated that there is an advantage to such assignment that transcends any interference with or restrictions on space available for the related University functions or for academic departments.

V Principles Regarding Utilization of Central Library Buildings

a. Highest priority shall be given to general library functions serving the University as a whole.
b. Assignments of space shall be made only to those units requiring intensive use of collections housed in the central library buildings.
c. No office space in central library buildings shall be assigned regular faculty members whose primary activities are in departments located elsewhere.
d. Permanent or temporary research space in central library buildings shall be made available only to faculty members or visiting scholars whose activities require the intensive use of collections housed in these buildings.
c. Study cubicles shall be made available on short term assignments in central library buildings for use of emeritus faculty when their scholarly activity requires use of library facilities.

VI Principles Regarding Space Assignment to Bureaus and Institutes

a. Space assigned bureaus and institutes shall be used primarily for the conduct of scholarly activity.
b. Faculty members having appointments in a department and in a bureau or institute shall be assigned only one office on an exclusive tenancy basis. Such office may be located either in department space or in space assigned the bureau or institute.
c. Expansion of staffs or functions of bureaus or institutes shall be subject to review in regard to space requirements in the same manner as is required of academic departments.
d. No new assignments of space will be made to research institutes and bureaus financed by extramural agencies unless requests are supported by evidence (1) that funds for rental space have been formally requested from and denied by the extramural granting agency or (2) that such a formal request could not be made without detriment to University interests.

VII Principles Regarding the Use of Temporary Buildings

a. The primary use of temporary buildings shall be for decanting departments that must be moved from their assigned quarters during the construction period of new buildings.
b. The assignment of space in a temporary building is made solely for the use expressed in the request. When the use has terminated, for whatever reason, the space is not to continue under departmental control, but immediately becomes available for other assignment.
c. Space assignments in temporary buildings shall be reviewed annually by the Space Assignment Officer.
d. As soon as it is known that all or part of a temporary building is to be vacated, the Subcommittee on Space Utilization shall determine whether the space is still vitally needed. If needed, a request shall be made that the entire vacated space be authorized for reassignment en masse or piecemeal, at the discretion of the Subcommittee.

D. SELECTED DATA ON MAJOR PERMANENT FACILITIES

Year Completed	*Structure*	*Approx. Gross sq. ft.*	*Architect*
	EXISTING		
1873	South Hall	30,000	David Farquharson
1898	Meeting Hall (f. Unitarian Church; acq. 1960)	5,000	A. C. Schweinfurth
1902	University House (f. President's House)	20,000	A. Pissis
1903	Hearst Greek Theater	43,000	John Galen Howard
1903	Men's Faculty Club	5,000	Bernard Maybeck
1905	California Hall	56,000	John Galen Howard
1906	Senior Men's Hall	3,000	John Galen Howard
1907	Hearst Memorial Mining Building	105,000	John Galen Howard
1911	Girton Hall	2,000	Julia Morgan
1911	Library	200,000	John Galen Howard
1912	Durant Hall (f. Boalt Hall)	24,000	John Galen Howard
1913	Agriculture Hall	47,000	John Galen Howard
1913	Sather Gate and Bridge	5,000	John Galen Howard
1914	Men's Faculty Club Addn. 1	5,000	Warren C. Perry
1914	Sather Tower (Campanile)	9,000	John Galen Howard
1917	Gilman Hall	45,000	John Galen Howard
1918	Hilgard Hall	71,000	John Galen Howard
1918	Library Addition	111,000	John Galen Howard
1918	Wheeler Hall	119,000	John Galen Howard
1920	Dwinelle Annex	11,000	John Galen Howard
1923	California Memorial Stadium	281,000	John Galen Howard
1923	Stephens Hall	73,000	John Galen Howard
1923	Women's Faculty Club	15,000	John Galen Howard
1923	University Extension (f. Farm Bureau Bldg.; acq. 1960)	51,000	William W. Plachek
1924	Haviland Hall	65,000	John Galen Howard
1924	Hesse Hall	9,000	John Galen Howard
1924	LeConte Hall	95,000	John Galen Howard

Year Completed	*Structure*	*Approx. Gross sq. ft.*	*Architect*
	EXISTING		
1925	Hearst Gymnasium for Women	128,000	Bernard Maybeck and Julia Morgan
1925	Men's Faculty Club Addn. 2	5,000	Warren C. Perry
1928	International House	243,000	George W. Kelham
1929	Bowles Hall	74,000	George W. Kelham
1930	Cowell Memorial Hospital	56,000	Arthur Brown, Jr.
1930	Giannini Hall	81,000	William C. Hays
1930	Heating Plant	9,000	George W. Kelham
1930	Life Sciences Building	381,000	George W. Kelham
1930	Richmond Service and Storage Facility (f. Ford Motor Co. plant; acq. 1961)	521,000	Albert Kahn & Assoc.
1931	Engineering Building	51,000	George W. Kelham
1931	Engineering Materials Lab.	61,000	George W. Kelham
1931	Eshleman Hall	46,000	George W. Kelham
1931	Hesse Hall Addn. 1	9,000	George W. Kelham
1933	Edwards Fields Bleachers	78,000	Warren C. Perry
1933	Harmon Gymnasium	168,000	George W. Kelham
1940	Biological Control Labs (Gill Tract)	28,000	H. Thomsen
1940	Sproul Hall	125,000	Arthur Brown, Jr.
1940	University Press Building	46,000	Masten & Hurd
1940	184" Cyclotron (LRL: 6)	26,000	Arthur Brown, Jr.
1941	Optometry Building (f. Durant Hall)	23,000	Arthur Brown, Jr.
1942	Donner Lab.	21,000	Arthur Brown, Jr.
1942	Stern Hall	43,000	Corbett & McMurray and W. W. Wurster
1944	Motor Generator (LRL:9)	6,000	Office of Arch. & Eng.
1944	Shop and Service Bldg. (LRL: 10)	13,000	Office of Arch. & Eng.

Year Completed	*Structure*	*Approx. Gross sq. ft.*	*Architect*
	EXISTING		
1946	Fernwald Residence Halls	109,000	Ratcliff & Ratcliff
1947	Hesse Hall Addn. 2	13,000	Corlett & Anderson
1948	Hearst Mining Bldg. Court Dev.	42,000	Michael A. Goodman
1948	Lewis Hall	58,000	E. Geoffrey Bangs
1948	Mulford Hall	71,000	Miller & Warnecke
1949	Library Annex	153,000	Arthur Brown, Jr.
1949	Dwinelle Annex Addn.	3,000	Michael A. Goodman
1949	Central Research Lab. (LRL: 50)	46,000	Hertzka & Knowles
1950	Cory Hall	129,000	Corlett & Anderson
1950	LeConte Addn.	66,000	Miller & Warnecke
1950	Bevatron (LRL: 51)	93,000	Masten & Hurd
1950	LRL Cafeteria (LRL: 54)	5,000	Hertzka & Knowles
1951	School of Law Building	99,000	Warren C. Perry & Assoc.
1951	Animal House (LRL: 55)	7,000	Hertzka & Knowles
1951	Accelerator Design (LRL: 64)	32,000	Indenco Engineering
1952	Biochemistry-Virus Lab.	63,000	Michael A. Goodman
1952	Biochemistry-Virus Greenhouses (Gill Tract)	7,000	Hertzka & Knowles
1952	Inst. of Transp. and Traffic Eng. (RFS: 450,51)	12,000	John Hudspeth
1952	Dwinelle Hall	229,000	Weihe, Frick & Kruse
1953	Cowell Memorial Hospital Addn. 1	4,000	Weihe, Frick & Kruse
1953	Insectary	8,000	Beals & Macky
1953	Home Economics Building	56,000	Spencer & Ambrose
1954	RFS Admin. Offices and Library (RFS: 452)	11,000	John Hudspeth
1954	Alumni House	15,000	Clarence W. Mayhew
1954	Forest Products Lab. (RFS: 477,78)	28,000	Thomsen & Wilson
1954	Low Temperature Lab.	27,000	Reynolds & Chamberlain
1954	Nuclear Chemistry (LRL: 70)	52,000	Eric Mendelsohn

Year Completed	*Structure*	*Approx. Gross sq. ft.*	*Architect*
	EXISTING		
1955	Donner Lab. Addn.	24,000	Reynolds & Chamberlain
1955	Warren Hall	74,000	Masten & Hurd
1955	Heavy Ion Accelerator (LRL: 71)	11,000	Corlett & Spackman
1955	Electronics Research (LRL: 80)	23,000	Corlett & Spackman
1956	Accelerator Design Remodel. (LRL: 64)	7,000	Corlett & Spackman
1957	Hearst Greek Theater Addn.	10,000	Ernest Born
1957	Pelican Building	2,000	Joseph Esherick
1957	LRL North Gate Office (LRL: 65)	3,000	LRL Plant Engineering
1957	Animal House Addn. (LRL: 55)	2,000	Corlett & Spackman
1958	Cory Hall Completion Step 1	...	Anderson, Hyde & Anderson
1958	Hearst Gymnasium Basement Development	14,000	Office of Arch. & Eng.
1958	Hertz Hall	30,000	Gardner A. Dailey
1958	Morrison Hall	40,000	Gardner A. Dailey
1958	Berkeley Services Building	112,000	John Lyon Reid & Assoc.
1958	Bubble Chamber (LRL: 59)	8,000	Milton Pflueger
1958	Heavy Ion Accelerator Addn. 1 (LRL: 71)	7,000	Corlett & Spackman
1959	Acid House	3,000	Office of Arch. & Eng.
1959	Campbell Hall	61,000	Warnecke & Warnecke
1959	Hesse Hall Addn. 3	39,000	Van Bourg & Nakamura
1959	Kroeber Hall	112,000	Gardner A. Dailey
1959	Men's Faculty Club Addn. 3	8,000	George Downs and Henry Lagorio
1959	Residence Halls Group 1	209,000	Warnecke & Warnecke
1959	School of Law Building Addn.	25,000	Warren C. Perry & Assoc.
1959	Stern Hall Addn.	11,000	Wurster, Bernardi & Emmons

Year Completed	*Structure*	*Approx. Gross sq. ft.*	*Architect*
	EXISTING		
1959	University Hall	152,000	Welton Becket & Assoc.
1959	LRL Cafeteria Addn. 1 (LRL: 54)	2,000	William McCormick
1960	Campus Commons	48,000	Hardison and DeMars
1960	Cowell Memorial Hospital Addn. 2	48,000	E. Geoffrey Bangs
1960	Oxford Greenhouses Unit 1	28,000	Donald S. Macky
1960	Handball Courts	10,000	Anderson, Jee and Willer
1960	Jones Child Study Center	10,000	Joseph Esherick
1960	Oxford-Addison Parking Structure	82,000	Anshen & Allen
1960	Kroeber Hall Parking Structure	77,000	Gardner A. Dailey
1960	Residence Halls Group 2	209,000	Warnecke & Warnecke
1960	Student Center Parking Structure	21,000	Hardison and DeMars
1960	88″ Cyclotron (LRL: 88)	35,000	Gerald McCue & Assoc.
1960	Engineering and Services Bldg. (LRL: 90)	74,000	Warnecke & Warnecke
1961	Cory Hall Completion Step 2	9,000	Anderson, Hyde & Anderson
1961	Earth Sciences Building	122,000	Warnecke & Warnecke
1961	Channing-Ellsworth Parking Structure	125,000	Donald L. Hardison
1961	Student Union Building	172,000	Hardison and DeMars
1961	LRL Cafeteria Addn. 2 (LRL: 54)	1,000	LRL Plant Engineering
1961	Nuclear Chemistry Addn. (LRL: 70)	68,000	Michael Gallis
1961	Heavy Ion Accelerator Addn. 2 (LRL: 71)	3,000	Corlett & Spackman
1961	Health Physics (LRL: 72)	5,000	Gerald McCue & Assoc.
1961	Field-Free Lab. (LRL: 73)	2,000	Kitchen & Hunt
1961	Radioisotope Services (LRL: 75)	4,000	Corlett & Spackman
1961	Engineering and Services Addn. (LRL: 90)	9,000	Warnecke & Warnecke
1962	Oxford Greenhouses Unit 2	42,000	Donald S. Macky
1962	Engineering-Hesse Courtyard Building	16,000	Van Bourg & Nakamura

Year Completed	Structure	Approx. Gross sq. ft.	Architect
	UNDER CONSTRUCTION		
*	Education-Psychology Building	288,000	Gardner A. Dailey
*	Animal Behavior Research Station	12,000	J. Francis Ward
*	Latimer Hall (Chemistry Unit 1)	195,000	Anshen & Allen
*	Parking Structure "D" Step 1	175,000	Anshen & Allen
*	Barrows Hall	187,000	Aleck L. Wilson & Assoc.
*	Etcheverry Hall Step 1	190,000	Skidmore, Owings & Merrill
*	LeConte Annex (Physics Unit 1)	95,000	John Carl Warnecke & Assoc.
*	Residence Halls Group	221,000	John Carl Warnecke & Assoc.
*	Married Students Apartments (Gill Tract)	361,000	Wurster, Bernardi & Emmons
*	184" Cyclotron Addition (LRL: 6)	8,000	Milton Pflueger
*	Central Research Lab. Addition (LRL: 50)	63,000	Spencer & Lee
*	Bevatron Addition (LRL: 51)	5,000	Milton Pflueger
*	Animal Bioradiological Lab. (LRL: 74)	12,000	Kitchen & Hunt
*	Environmental Design Building	210,000	DeMars, Eshrick and Olsen
*	Bio-Organic (Photosynthesis) Lab.	32,000	Michael A. Goodman
*	Sanitary Engineering Building (RFS)	17,000	Marquis & Stoller

* Under construction as of June 1, 1962.
(LRL) = Lawrence Radiation Laboratory.
(RFS) = Richmond Field Station.

E. SELECTED DATA ON MAJOR POTENTIAL FACILITIES

Structure	*Approx. Gross sq. ft.*	*Approx Cost ($1,000)*	*Architect*
AUTHORIZED OR IN 5-YEAR MAJOR CAPITAL PROGRAM			
Biochemistry Building	80,000	4,200	Wurster, Bernardi & Emmons
Eshleman Hall (Student Office Building)	50,000	1,300	Hardison and DeMars
LRL Mechanical Shops (LRL: 77)	60,000	2,600	Anderson, Hyde & Anderson
U. S. Dept. of Agriculture Quarantine Fac. (Gill)	4,600	200	Donald S. Macky
Cancer Research Genetics Unit (Warren Hall Addn.)	10,000	600	Masten, Hurd & Gwathmy
Space Sciences Laboratory	40,000	2,000	Anshen & Allen
Bodega Marine Laboratory	57,000	1,500	....
Law Complex	95,000	3,200	Public Structures, Inc.
Auditorium-Theater	148,000	5,200	Hardison and DeMars
LRL Corporation Yard Facilities	42,000	1,500	Corlett & Spackman
Inorganic Materials Lab. (LRL)	45,000	2,500	Michael A. Gallis
Animal Bioradiological Lab. Addn. (LRL)	19,000	1,000	Kitchen & Hunt
Lawrence Memorial Hall of Science	350,000	12,000	....
Physical Sciences Lecture Hall	13,000	700	Anshen & Allen
Chemistry Unit 2	130,000	6,700	Anshen & Allen
Mathematical Sciences Building	180,000	5,700	....
Union Field Replacement	.....	200	....
Engineering Materials Laboratory Addn.	130,000	4,700	Skidmore, Owings & Merrill
Engineering Materials Laboratory Test Machine (RFS)	12,000	400	Skidmore, Owings & Merrill
Entomology, Genetics and Insect Pathology (Gill)	55,000	2,100	....
Undergraduate Library	120,000	4,000	....
Hearst Gymnasium Addn.	36,000	1,200	....

Structure	*Approx. Gross sq. ft.*	*Approx. Cost ($1,000)*	*Architect*
AUTHORIZED OR IN 5-YEAR MAJOR CAPITAL PROGRAM			
Forest Products Lab. Addn. (RFS)	5,000	500	....
Virus Laboratory	83,000	4,300	....
Etcheverry Hall Step 2	133,000	5,000	....
Botany Laboratory	8,000	400	....
Hearst-Scenic Parking Structure	150,000	1,300	Anshen & Allen
Applied Research Lab. (LRL)	100,000	2,200	....
Biomedical Complex (LRL)	157,000	....	....
Plasma Research Building (LRL)	36,000	900	....
Parking Structure "D" Step 2	40,000	1,600	....
NOT PROGRAMMED BUT WITH SITE SELECTED			
Residence Halls Group 4	220,000	6,000	....
Student Services Building	140,000	4,300	....
Chemistry Unit 3	67,000	3,600	....
Nuclear Engineering Building	45,000	1,600	....
University Arts Center	55,000	2,000	....
Health Sciences Building	100,000	5,000	....
Parking Structure "J"	145,000	1,900	....
Forestry Laboratory	17,000	700	....
Engineering Unit 2	290,000	10,400	....
Engineering Unit 3	150,000	5,100	....
Biological Sciences Building	130,000	6,700	....
Seismographic Station	8,000	300	....
Physics Unit 2	67,000	3,200	....
Inorganic Materials Lab. Unit 2 (LRL)	45,000	....	....
Conference Center	63,000	....	....

Structure	*Approx. Gross sq. ft.*	*Approx Cost ($1,000)*	*Architect*
NOT PROGRAMMED BUT WITH SITE SELECTED			
Humanities Institute	10,000	....	....
Married Students Apartments Group 2 (Gill Tract)	309,000	....	....
Agricultural Services Bldg. Addn. (Gill Tract)	5,000	....	....
Greenhouses Group 3 (Gill Tract)	20,000	....	....
Phytotron (Gill Tract)	26,000	....	....
RFS Auditorium	15,000	....	....
Institute of Engineering Research (RFS)	40,000	....	....
Civil Engineering Building (RFS)	22,000	....	....
Mechanical Engineering Building (RFS)	21,000	....	....
Ship Seaworthiness Facility (RFS)	132,000	....	....
Naval Architecture Building (RFS)	25,000	....	....
Towing Tank Addn. (RFS)	10,000	....	....
Aeronautical Sciences Building (RFS)	39,000	....	....
Storage Building (RFS)	54,000	....	....
Shops Building (RFS)	11,000	....	....
NOT PROGRAMMED AND WITHOUT SITE SELECTED			
Optometry Building Addn.	30,000	1,000	....
Music Department Addn.	28,000	1,200	....
Berkeley Services Building Addn.	60,000	1,000	....
Graduate Students Residence Hall	130,000	3,700	....
Intramural Gymnasium	67,000	1,700	....
Education-Psychology Unit 2	80,000	2,800	....
Basketball Pavilion	150,000	4,500	....
Donner Laboratory Unit 2	29,000	....	....
Parking Structure "K"	195,000	1,500	....

Structure	*Approx. Gross sq. ft.*	*Approx. Cost ($1,000)*	*Architect*
NOT PROGRAMMED AND WITHOUT SITE SELECTED			
Residence Halls Group 5	220,000	6,700	....
Residence Halls Group 6	220,000	6,700	....
Parking Structure "L"	120,000	1,500	....
Physics Unit 3	43,000	800	....
Leuschner Observatory	10,000	200	....
Systematic Entomology Center (Gill Tract)	17,000	700	....
Environmental Physiology Laboratory	20,000	....	....
Residence Halls Group 7	141,000	4,200	....
Residence Halls Group 8	141,000	4,200	....
Bancroft-Fulton Parking Structure	150,000	1,500	....
Hearst Field Parking Structure	160,000	1,700	....
Mining Circle Parking Structure	60,000	500	....
Hearst-LaLoma Parking Structure	130,000	1,200	....
Edwards Field Parking Structure	260,000	2,100	....
Agricultural Sciences Building	108,000	....	....
Oxford Greenhouses Unit 3	41,000	....	....
Insectary Unit 2	9,000	....	....
Armory	150,000	....	....
Engineering and Services Addn. 2 (LRL)	9,000	....	....
88" Cyclotron Addn. (LRL)	15,000	....	....
Central Research Lab. Addn. (LRL)	90,000	....	....
Heavy Ion Accelerator Addn. (LRL)	8,000	....	....
Research and Data Processing Center (LRL)	90,000	....	....
Scientific Research Lab. (LRL)	120,000	....	.. .
Central Stores (LRL)	60,000	....	....
Plasma Research Unit 2 (LRL)	25,000	....	....